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Office of Administrative Law Judges
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Issue Date: 09 June 2003

CASE NO.: 2002-LHC-1011

OWCP NO.: 1-153604

In the Matter Of:

JAMES L. BIRNIE (Dec.)
Claimant

v.

ELECTRIC BOAT CORPORATION
Employer/Self-Insured

DECISION AND ORDER AWARDING BENEFITS

This proceeding arises from a claim for survivor's benefits filed by Jean D. Birnie ("the Claimant"), the widow of James L. Birnie, against his employer, Electric Boat Corporation ("Employer" or "EBC"), under the Longshore and Harbor Workers' Compensation Act, as amended, 33 U.S.C. § 901, *et seq.* ("the Act"). After an informal conference before the District Director of the Department of Labor's Office of Workers' Compensation Programs ("OWCP"), the matter was referred to the Office of Administrative Law Judges for a formal hearing before Administrative Law Judge Richard T. Stansell-Gamm. By motion received on June 12, 2002, Employer moved for summary decision, and on October 9, 2002, Claimant filed an opposition to Employer's motion and a cross-motion for summary decision. By order issued November 6, 2002, Judge Stansell-Gamm deferred ruling on the summary decision motions as he determined that a potential issue of material fact was involved in the resolution of the second issue raised by Claimant as a basis for compensation and that a hearing was the appropriate procedure to develop a record to assist in its resolution.

In accordance with our usual docketing procedures, the matter was transferred to me on January 6, 2003, and I conducted a hearing in New London, Connecticut on February 13, 2003, at which time all parties were given the opportunity to present evidence and oral argument. The Claimant appeared at the hearing represented by counsel, and an appearance was made by counsel on behalf of the Employer. At the hearing, testimony was received from the Claimant, Robert Hutchinson, an EBC employee, on behalf of the Claimant, and Thomas Godar, M.D., Employer's medical expert. Documentary evidence was admitted without objection as: Claimant's Exhibit CX

1-16; Employer's Exhibits RX 1-38; and a Stipulation signed by both counsel was designated as Joint Exhibit JX-1. The official documents in the file were received into evidence as Administrative Law Judge Exhibits ALJX 1-26. After the hearing, Claimant offered the deposition transcript of John P. Bigos, M.D., taken on March 14, 2003, as Exhibit CX- 17. No objection having been taken, it will be received into evidence. In addition, by letter received on March 31, 2003, Employer advised that the parties had reached a stipulation as to average weekly wage, which has been marked and will be received into evidence as Exhibit ALJX- 27. Post-hearing briefs were authorized and received by Employer on April 30, 2003, in which it also renewed its prior motion for summary decision, and by Claimant on May 1, 2003. Pursuant to an order issued on May 8, 2003, reply briefs were allowed and timely filed by Claimant on May 20, 2003. No reply brief was filed by the Employer.¹

STIPULATIONS AND ISSUES PRESENTED

The parties offered the following stipulations which I now adopt as my findings:

- (1) the injury occurred on June 9, 2001 (death);
- (2) the injury occurred at Electric Boat Fitness Center;
- (3) the Employer was timely notified of the injury;
- (4) the claim for benefits was timely filed;
- (5) the Notice of Controversion was timely filed;
- (6) the informal conference was conducted on January 16, 2002;
- (7) the worker's average weekly wage at time of injury was \$1,151.63.²

JX 1. In addition, the parties indicated that the unresolved issues for adjudication are: (1) did the injury arise out of and in the course of employment and (2) causation. JX 1.

¹ On March 6, 2002, Employer filed a request for section 8(f) relief directly with the Office of Administrative Law Judges, which it subsequently withdrew by letter received on May 7, 2003.

² By letter filed on March 28, 2003, counsel for the Employer advised that the parties had agreed to an average weekly wage of \$1,151.63. Exh. ALJX- 27.

SUMMARY OF THE EVIDENCE

Claimant's testimony

The Claimant, Jean D. Birnie, testified that she married her husband, James Birnie, on December 17, 1966, remained married to him until his death, and has not remarried since that time. TR 24-25. She stated that her husband worked for EBC in Connecticut primarily as a test technician, and he had told her that his job duties involved hauling hoses, climbing and descending ladders, and building new submarines. TR 26-27, 40. She disagreed that his work environment could be characterized as "clean" because, often when he came home, his clothes would have dirt, soot, and oil on them. TR 27. He had complained to her that he was getting too old to perform the physical requirements of the test technician job and that it bothered his knees, and for about the last two years of his employment at EBC he worked in casualty control, dispatching emergency service providers. TR 28-29, 42. Mrs. Birnie testified that her husband worked the 3:00 to 11:00 and 11:00 to 7:00 shifts as a test technician and the 7:00 to 3:00 shift in casualty control, also working overtime on both days of the weekend for the same hours, 7:00 to 3:00. TR 29-30. She had no knowledge that her husband was exposed to dust or fumes in the casualty control job, and she stated that they never discussed any of his industrial exposures at EBC. TR 41. She knew that he went through an annual program to be qualified to use a respirator, but did not know if he regularly wore a respirator. TR 41. She stated that he did tours in the Navy, the second of which was in 1974, and he had told her about exposure to various dusts and fumes while he was in the Navy, but she did not know what kind of dust and fumes. TR 31, 57.

Mrs. Birnie did not recall her husband ever having pneumonia, but he had had bronchitis. TR 30-31. She agreed that her husband was slender when they got married, weighing about 150 pounds when they first met in 1965 and that he gained weight about the time he started to work at EBC. TR 32-33, 42. She stated that in the 1980's and through the mid-1990's, he had poor dietary habits, drank up to a six-pack of beer per day on non-working days, and would often only sleep five hours per night, but he did play sports activities with their son at home. TR 44-46. She did not recall him ever complaining about these sports activities or doing chores around the house during the 1980's or 1990's. TR 45-46. She agreed that her husband was about 5 feet 8 ½ inches tall and that medical notes showing he weighed 235 pounds in 1997 would be reasonable. TR 43. She stated that he began watching his weight about four years before his death by modifying his diet, walking, and going to the gym onsite at EBC, and that the birth of their grandson probably prompted this change in lifestyle. TR 32-33, 42, 46-47.

Mrs. Birnie stated that her husband had belonged to the Fitness Center at EBC for at least a year beginning in about August of 2000 and cut down on his walking activities at that time. TR 33, 37, 49-50. She acknowledged that he joined the Fitness Center at EBC because of the convenience and to improve his health and was cleared for working out by Dr. Beason. TR 50. She stated that he never complained about any problems with his exercise routine and that he typically went to the gym before his work shift began, leaving home about 4:45 a.m. about five to six mornings a week. TR 33-34, 48. She stated that she saw him leave five to seven mornings per week with his gym bag,

which he would bring back home that day with dirty clothes. TR 50-51. She had no doubt that he was working out five to seven days per week. TR 51. She agreed that he lost approximately 60 pounds from his dieting and exercise activities. TR 49.

Mrs. Birnie testified that her husband was not working on the weekend of his death because he had taken the weekend off to go to a wedding on Sunday, June 10th. TR 34. She acknowledged that his only purpose in going to EBC on that day was to work out and that her husband was not paid for any time that he spent in the Fitness Center. TR 40. She further stated that she did not know if he even worked out that day. TR 53-55. She testified that he worked out on the Friday before his death and they had gone to dinner at Constantine's, an Italian restaurant in Niantic, which was a "splurge" for him. TR 35, 52. To her knowledge, her husband slept well that night, but it was a very warm night in June. TR 53. She stated she was not awake when he left for the gym the next morning, but he had left her a note alongside two empty pill bottles for his blood pressure medication asking her to have them filled. TR 35, 52-54. She did not know whether he had taken his blood pressure medication that day, but there was a glass in the sink with water in it. TR 53-55. She stated that he would not have asked her to have his medication filled after weeks or days without them and that she saw him take them every day. TR 57-58.

Mrs. Birnie testified that Dr. Johnson came to her house to inform her about the accident. TR 35. She did not recall telling Dr. Johnson that her husband had not been feeling well that week and stated that to the best of her knowledge, he had been feeling well. TR 35-36. She stated that during the last couple years of his life, her husband had engaged in hobbies like computers and did things around the house. TR 36. She continued that going to the gym made a big difference for him, in that he looked much better and had a lot of energy. TR 37. He did not typically eat breakfast before going to the gym. TR 55. She stated that he had been a smoker when they met in 1965, had smoked about a pack of cigarettes per day until about 10 or 12 years ago when he quit, although she admitted that he would have been exposed to second-hand smoke even after that time. TR 38-39.

Mrs. Birnie testified that she spoke with Dr. Beason, her husband's treating physician of about 10 years, on the day of his death, and Dr. Beason told her that it looked like a heart attack and recommended against having an autopsy. TR 55. She agreed that her husband had last been to the doctor in June of 2000, relating that they each went to the doctor once a year, and had been scheduled for an annual visit in a few weeks when he died. TR 37, 56. She did not know of anything that had to be attended to at the June 2000 appointment and stated that he took medications regularly for hypertension every morning with an aspirin and a glass of orange juice. TR 37, 54. Regarding other doctors, she added that her husband had a catheterization done in about 1995, but she did not remember a follow up with a cardiologist. TR 56-57.

Testimony of Robert Hutchinson

On behalf of the Claimant, Robert Hutchinson testified at the hearing that he worked at EBC for approximately 40 years, from 1958 until about 1998, in the STO (Shipyard Test Organization)

Department with Mr. Birnie, working both the third and second shifts together. TR 58-60. He estimated that he worked in the third shift from 1958 until sometime into the 1970's and that he and Mr. Birnie were transferred to the second shift at the same time. TR 68-69. He recalled that they worked together on the Tridents and the FBM vessels and that they worked on new construction and overhauls in the 1970's on the third shift. TR 72-73. He described overhauls as more hectic in terms of scheduling and agreed that they involved cutting and ripping out pieces of equipment. TR 79.

Mr. Hutchinson explained that test technicians work in the STO Department and test all the systems, including those in the engine rooms, machinery spaces, and auxiliary machine spaces in the submarine to confirm they are functioning properly and to spec before turning them over to the Navy. TR 59-50. He stated that the physical nature of Mr. Birnie's work involved climbing ladders and stairs. TR 75. It did not seem to him that Mr. Birnie had difficulty performing his job, including the physical nature of the job, and he was not aware that Mr. Birnie was given preferential assignments or job responsibilities. TR 75-76. He testified that when he worked on the third shift, which was a small shift, with Mr. Birnie, there were workers other than test technicians working at the same time, including ladders and pipe coverers in the engine room, machinists, pipefitters, x-ray, welders, burners, grinders, and cleaners. TR 60-61. He acknowledged that these other tradespeople created dust, fumes, and smoke through their work and that the STO technicians were exposed to these substances. TR 61, 66.

Mr. Hutchinson related that in the 1980's and 1990's, the STO technicians were required to go to breathing protection classes to become qualified to wear respirators, and to the best of his knowledge, these classes began after asbestos became an issue or around that time frame. TR 61-65. From these classes, he understood that he was supposed to retrieve a respirator when there was dust, smoke, or residue in the air. TR 65-66. He stated that the workers used both dust masks, white masks with an elastic band similar to those found in a hardware store, and respirators with cartridges that looked like a double pig snout, but their use was discretionary. TR 61-63. He stated that the technicians were required to check in and out respirators, indicating that records may have been kept. TR 64.

Mr. Hutchinson stated that Mr. Birnie often worked in refrigeration and would be stuck there his entire shift with grinding and burning going on, and that in general the technicians, depending on the job, were not able to leave their locations to retrieve a respirator. TR 62. When asked if he saw Mr. Birnie exposed to lung irritants and without a respirator, he responded, "I've seen him. He's been in the same situations I've been, where he'd be stuck on the boat and couldn't get off, and have to wait for a relief to come down so he could go up and get a dust mask or something of that nature, or just to go to the bathroom. That was the nature of our business." TR 71-72. He was not aware that Mr. Birnie missed any work or was unable to finish a work shift because of these exposures. TR 72. He knew that Mr. Birnie had medical problems, but did inquire about them. TR 72. He did not see Mr. Birnie wear a respirator or a dust mask, except perhaps on one or two occasions, explaining that he typically worked in the back area, the engine room, and Mr. Birnie worked up forward in refrigeration, and he did not have an occasion to go up forward. TR 63-64. The only contact he had with Mr. Birnie during the shift would be when Mr. Birnie occasionally came to the back area, and

he did not necessarily see Mr. Birnie every day TR 64. He stated that they met regularly at the gate at the beginning of their shift to have coffee and talk, and he usually saw Mr. Birnie when he was leaving the shipyard with Mr. Birnie typically using the exit area closest to the gate. TR 66-67, 70. He assumed this was because Mr. Birnie had problems with his breathing and this allowed him to take his time getting to the exit area in order to leave the shipyard at the designated time. TR 67. He stated that on occasion he walked with Mr. Birnie up a big hill to that exit area and Mr. Birnie would usually walk slow and take his time, and Mr. Birnie told him that eventually he was given a pass to ride up the hill. TR 67.

Mr. Hutchinson testified that he has a claim against EBC for injuries to his back and knees and not for breathing or respiratory problems. TR 69-70. He stated that he socialized with Mr. Birnie, having dinner together and visiting each other's homes, with Mr. Birnie helping his daughter learn to use a computer. TR 70. He was aware that at some point, Mr. Birnie began dieting and working out at the Fitness Center at EBC, and Mr. Birnie called him to keep in touch and saw him on occasion after he left EBC and told Mr. Hutchinson that he was working out in the mornings. TR 76-77. A couple of years before his death, Mr. Birnie had complained to him about medical problems, that he had seen some doctors and was trying to lose weight, but did not specify the type of problems. TR 77-78. On the weekend that he died, Mr. Birnie had been scheduled to be a guest at Mr. Hutchinson's daughter's wedding, which he acknowledged was why Mr. Birnie was not working at EBC. TR 79-80.

Medical Evidence

Records from Lawrence and Memorial Hospital show that Mr. Birnie was admitted on May 5, 1988 for two days for cellulitis of the left leg. EX 6; EX 7. These records also indicate that, at that time, Mr. Birnie was 5 feet 8 inches tall, weighed 250 pounds, and had a past history of smoking 3/4 pack of cigarettes per day and drinking beer at night. *Id.* A Cardiac Catheterization Report from Lawrence and Memorial Hospital, dated April 25, 1995, shows that Mr. Birnie underwent a cardiac catheterization procedure for "[c]oronary artery disease with significant coronary artery obstruction in a small vessel. Significant proximal circ. and first obtuse marginal disease and non-critical LAD disease." EX 8. Mr. Birnie visited Charter Oak Walk-In Medical Center on May 8, 1996 for recheck on his hypertension and refill of his medications by B. Geoffrey Burnham, PA. EX 9.

On November 5, 1996, Mr. Birnie was treated by W. Larry Beason, M.D. at Charter Oak Walk-In Medical Center. EX 10. Dr. Beason reported that

[t]he patient comes in today with increasing shortness of breath for several years. He had his heart worked up last Spring, which shows coronary vascular disease, but mostly in nondominant arteries, but significant stenosis in those arteries. He has preserved systolic function, and I don't believe the shortness of breath, which is exertion-related, is due to the coronary situation. It is mostly due to his weight. He also had a recent B-reader film through work that showed some pleural thickening, with working in the shipyard. He will need to get this evaluated and have referred

him to Dr. Bigos to straighten that out. He also has a problem with itching in the skin ... due to his excessive weight. We discussed that as another risk factor for his coronary artery disease, and he has stopped smoking since 1993.

EX 10. Dr. Beason's notes show that he examined Mr. Birnie on February 28, 1998 and reported that a pulmonologist at St. Francis in Hartford related his respiratory problems to excessive weight. ALJX 13, Ex. 13. On that date, Dr. Beason also wrote that Mr. Birnie had not been taking his medication, missing 2 or 3 days at a time, with blood pressure management problems. *Id.* On February 9, 1999, Dr. Beason noted a 40-pound weight loss since last December, shortness of breath decrease, no chest pain, blood pressure down with weight loss, and the possibility of stopping medication, along with Mr. Birnie's reports that he would like to begin exercising after another 30-pound weight loss. EX 23. On June 29, 2000, Dr. Beason reported the maintenance of a 50-pound weight loss, recommended that he begin exercising very slowly with low weights at the Fitness Center at EBC, with no change in blood pressure medications. EX 31.

Claimant offered an asbestos questionnaire, dated February 18, 1998, and signed by Mr. Birnie and Kathryn P. Johnson, which indicates that Mr. Birnie reported asbestos exposure throughout his entire employment when replacing gaskets and that he never used any kind of protection and has had x-rays/PFT's conducted by his own doctor. CX 4 at 1. In addition, Mr. Birnie signed a respiratory medical questionnaire, dated February 18, 1998, in which he indicates persistent cough mostly upon exertion, constant shortness of breath, medication taken for high blood pressure, has two prescription inhalers, and has worn a respirator. CX 4 at 2.

John P. Bigos, M.D.

Claimant introduced a consultation report from John P. Bigos, M.D., dated November 11, 1996, showing that he examined Mr. Birnie, reporting a significant occupational history for asbestos exposure in the U.S. Navy and in overhaul work at EBC. CX 1. A CT scan of the chest taken on November 29, 1996 which showed pleural thickening and areas of patchy interstitial infiltrate in left chest. EX 11. On December 5, 1996, Dr. Bigos sent a letter to Dr. Johnson at EBC informing her that he was treating Mr. Birnie for COPD and Interstitial Lung Disease, assigning no work restrictions except to be given a ride up the hill. EX 32. Subsequent CT scans taken on March 12, 1997 and January 17, 1998 showed no changes, only chronic scarring for his history of pleural thickening. CX 2; CX 3.

John Bigos, M.D., referred Mr. Birnie to M.M. Deren, M.D., for an evaluation of a his left chest infiltrate and pleural thickening conducted on or about January 9, 1997. EX 12. Dr. Deren reported that x-ray and CT scan confirmed pleural thickening on left side with right side normal, which were not typical of asbestos-related disease. *Id.* A pulmonary function test was conducted by Dr. Bigos without a date which showed severe obstructive pulmonary disease with restrictive disease not excluded by the test. EX 13.

By letter dated August 23, 2002 to Claimant's attorney, Dr. Bigos provided the opinion that,

[Mr. Birnie] had both obstructive and restrictive lung disease. His exposure to industrial irritants at Electric Boat directly contributed to his respiratory condition.

This condition was a significant factor in limiting his ability to engage in an [sic] meaningful exertion and as such contributed to his deconditioned state and consequent cardiac problems and ultimate demise.

CX 5.

By deposition taken on March 14, 2003, Dr. Bigos testified that he graduated from University of Connecticut Medical School and Harvard University School of Public Health, interned at Hartford Hospital, was a resident in internal medicine, Danbury, Yale New Haven and was a pulmonary fellow at Norwalk and Yale New Haven. *Id.* at CX 17 at 3-4. He described the field of public health as involving epidemiology, statistical analysis, and disease trends related to occupational issues. *Id.* at 4. He limits his practice to pulmonary medicine and is board certified in pulmonary specialty as of 1992 with recertification in 2002, which, according to him, demonstrates that a physician is up-to-date with recent medical developments. *Id.* at 4-5. He stated that he was involved in this case because Mr. Birnie had been his patient and that he does not review cases for solely defense, medical malpractice, or workers' compensation purposes. *Id.* at 63.

Dr. Bigos testified that he has seen many EBC employees, has become familiar with some of its industrial practices and exposures, and examined Mr. Birnie on November 11, 1996, as a referral from Dr. Beason to sort out the pulmonary contribution to his symptoms, including increasing shortness of breath. *Id.* at 6-7. In his estimation, he examined Mr. Birnie about four times, the last of which on January 28, 1998. *Id.* at 42-45. During the initial examination, he obtained an oral medical history, which included a thallium stress test and a cardiac catheterization in 1995 that showed problems, but normal main artery of the heart, and a normal EKG. *Id.* at 7. He related Mr. Birnie's shortness of breath to these cardiac problems because the problems can result in inadequate oxygenation of the heart muscle which causes problems in supplying oxygen to the blood and the tissues. *Id.* at 7-8. In addition, he obtained an oral occupational history, which included work as a machinist in the Navy from 1961 to 1965; metal grinder in a roller bearing factory from 1965 to 1972; machinist in the Navy for the second time from 1974 to 1980; and an EBC employee starting in 1980; with asbestos exposure reported for both tours in the Navy and overhaul work at EBC. *Id.* at 8. In forming his opinions, Dr. Bigos stated that he did not review Mrs. Birnie's deposition or the trial transcript. *Id.* at 41-42.

Dr. Bigos referred to his November 1996 consultation note where he mentioned that chest x-rays from June 1996 showed thickening consistent with pleural lining, which was not present in the 1980 x-rays. *Id.* at 13. He testified that he pinpoints a cause for pleural scarring by using a process of elimination and through the clinical exam, medical history, occupational history, and radiographic and laboratory findings. *Id.* He determined that Mr. Birnie's pleural thickening was caused by asbestos exposure both pre- and post-1980, as there was no history of pneumonia, which can also cause pleural scarring, as well as a trauma. *Id.* at 13-14. He also observed a heart murmur, which

is not necessarily a problem, but if there is a valve problem, this could contribute to shortness of breath and other cardiac issues. *Id.* at 15-16.

Dr. Bigos testified that he conducted pulmonary function tests that were consistent with a combined obstructive and restricted defect. *Id.* at 16. He explained that obstructive defects cause a decrease in the volume of air expelled per second, but not total forced volume capacity, and restrictive defects, in this context, would restrict the ability of the lung to fully expand. *Id.* 16-18. He found a total lung capacity of 77 percent which he characterized as a “pseudo-normalization of lung volumes,” resulting from combined restrictive and obstructive processes because with a straight obstructive restriction there would be a typical total capacity of 140 and with a restrictive a total capacity of 50 to 60 *Id.* at 18-19. Regarding the diffusion capacity findings, Dr. Bigos testified that it was also reduced at 77 percent and explained that diffusion capacity indicates how well air gets into the villi, the structural functional unit of the lung, allowing oxygen to pass into the blood stream and carbon dioxide to be exhaled. *Id.* at 19-20. He continued that with scar tissue, the diffusion capacity is impaired. *Id.*.

Dr. Bigos summarized his 1996 findings about the cause of Mr. Birnie’s problems as consistent with Dr. Beason’s opinion that it was multi-factorial, including lung issues, significant cardiac history, and occupational exposures. *Id.* at 21-22. He related that he wrote to Dr. Johnson at EBC in December of 1996, informing her that he was treating Mr. Birnie for COPD, obstructive lung disease, and interstitial lung disease, but assigned no work restrictions other than for a bus pass to go up the hill in the south yard because Mr. Birnie was treating with a cardiologist and had wanted to continue working. *Id.* at 22-23. He referred Mr. Birnie to Dr. Deren, a thoracic surgeon, to elicit his opinion about the asymmetric pleural thickening, his symptoms, and the possibility of developing mesothelioma. *Id.* at 23-24. He agreed that there were no reports of mesothelioma for the following five years, which indicated that he was safe from developing it. *Id.* at 24.

Dr. Bigos conducted another pulmonary function test on January 28, 1998 with worsened findings. *Id.* at 38. He stated that interstitial lung disease does not necessarily show up radiologically and high resolution CAT scan show scarring that may not show up in chest x-rays. *Id.* at 20-21. He agreed with the radiologist’s findings of the January 17, 1998 CAT scan, which was not high resolution, of infiltrates in the left lower lob posteriorly, pleural thickening in the left lower chest, and areas of pleural and chloromencinal fibrosis, which Dr. Bigos considered consistent with occupational asbestos exposure. *Id.* at 25-26. He prescribed an inhaler, Serevent, for the obstructive impairment, and testified that there was no treatment for the restrictive impairment. *Id.* at 26. He stated that Mr. Birnie’s complaints of coughing upon exertion may be a result of the obstructive lung disease. *Id.* at 27. He agreed that Mr. Birnie’s wife’s second-hand smoke would have contributed to his COPD. *Id.* at 39.

Regarding Mr. Birnie’s weight loss, Dr. Bigos testified that it would have been beneficial for his cardiovascular status and his ability to exert himself. *Id.* at 27-28. He explained the process of how the shortness of breath would affect his ability to exercise, in that

your right heart that takes deoxygenated blood that returns to the chest, and that right heart pumps the blood through the lungs to oxygenate the blood and to get rid of carbon dioxide in the blood. The blood then goes to the left heart where it is fully oxygenated and then it's distributed throughout the arterial system to the tissues of the body, the muscles and the other organs. When a person has a problem both in getting air into their lungs and then another problem is once the air is in the lungs, getting oxygen by passive diffusion to cross into the blood stream the ability to deliver oxygenated blood is limited; and as demands are increased on the tissues, specifically with exercise or increased exertion, there is already a fixed limitation that's pre-existing to oxygenate blood.

... In other words, because of the increased transit time that it takes for oxygen to cross into the blood stream and because of the less amount of time that's available because of the increase cardiac output because of exercise – cardiac output necessarily must increase with exercise in order to deliver the increased fuel to the tissues, but as a result of that, the blood has less time to stay in the lungs to get oxygenated and because of the limitation for oxygen to cross into the blood stream because of two factors; obstruction to air and limitation in the amount of air you can move at any given minute, and once the air is there, the inability for the air because of fibrosis to get into the bloodstream --

Q Compounding the restriction.

A You have two compounding factors that significantly limit the amount of blood that you can oxygenate at any given time independent of the heart.

Q So that affects a person's ability to exercise?

A Absolutely, and it manifests itself very significantly with exercise. At rest your cardiac output is much less; therefore, the blood stays in the lungs longer. A given unit of blood will have a greater period of time to sit in the lungs; therefore, it will have a greater amount of time to oxygenate.

Id. at 28-30. He continued that this would explain Dr. Beason's recommendation for Mr. Birnie to begin exercising slowly at the Fitness Center. *Id.* at 30-31.

Dr. Bigos agreed that Mr. Birnie's exposure to general industrial irritants at EBC and smoking contributed to his obstructive lung disease and his occupational asbestos exposures contributed to the restrictive lung disease. *Id.* at 31-32. He testified that his obesity contributed to the pulmonary conditions, but to a lesser extent with the weight loss. *Id.* at 32-33. He testified that these impairments would limit his ability to engage in significant exercise activities, which contributed to his deconditioned state, defined as "being overweight and having poor cardiovascular condition," which contributed to his death *Id.* at 32-33. He agreed that this deconditioned state would make his

cardiovascular risk very high when he engaged in significant exercise activity. *Id.* at 33-34. He explained that,

the final pathway for all of these conditions is poor blood supply and one of the areas that you get poor blood supply to, which is a critical area, is to the heart or poor oxygenated blood, poor delivery of oxygenated blood, which is in the end what a heart attack is, the lack of oxygenated blood to the heart.

Id. at 34.

Dr. Bigos assigned Mr. Birnie a Class III impairment of approximately 33% of the whole body. *Id.* at 37. He was aware of his hypertension problems, but did not know how long he had been on high blood pressure medication, leaving the hypertension and cardiovascular issues for Dr. Beason and his cardiologist. *Id.* at 39-40, 46-47. He had not made any recommendations for diet and exercise, particularly because it would be dangerous to recommend a random exercise problem with a history of pulmonary and cardiac problems. *Id.* at 48.

Regarding Dr. Godar's report, Dr. Bigos offered no comment on whether Mr. Birnie had "centralized obesity" as he was not an endocrinologist or metabolic expert. *Id.* at 51-52. He disagreed that Mr. Birnie had no evidence of pleural plaquing and agreed that the abnormality was only on the left-hand side and found no structural or congenital type of abnormality in the lungs. *Id.* at 53-55. He testified that the left-side abnormality impacted his lung function, but could not quantify the extent of impact. *Id.* at 55. Regarding the impact of his excessive weight on the restriction, he stated that obesity as a cause may seem logical on its face, but the official position of the American College of Chest Physicians and their board review course is that a restrictive finding on pulmonary function tests should not be attributed to weight and he agreed with the position. *Id.* at 56-57. He added that the studies that even begin to use obesity as impacting restrictive function would require Mr. Birnie to have been approximately 100 pounds heavier than he was. *Id.* at 57-58. He disagreed that Mr. Birnie's weight was contributing to his restriction. *Id.* at 59.

Dr. Bigos testified that he had no knowledge of Mr. Birnie's exercise program at the Fitness Center, but knew that he had an active, as opposed to sedentary, occupation. *Id.* at 50-51. He explained the opinion in his August 2002 report that Mr. Birnie's lung condition was a significant factor in limiting his ability to engage in meaningful exercise by increasing his inability to adequately oxygenate his blood. *Id.* at 64. He stated that Mr. Birnie had a desaturation from 94 to 91 percent with walking, which indicated a very significant respiratory impairment. *Id.* at 64-65. He was unaware of a congenital deformity to the rib cage on the x-rays mentioned by Dr. Godar. *Id.* at 65.

Thomas Godar, M.D.

The Employer introduced a consultation report produced by Thomas J. Godar, M.D., showing he conducted a physical examination and pulmonary function test of Mr. Birnie and a medical records review. EX 14-15. In his report, Dr. Godar's impressions included that Mr. Birnie had a mild

pulmonary restriction due to substantial central obesity and chronic asymmetrical pleural thickening likely caused by infection or trauma; coronary artery stenosis, angina pectoris; mild COPD, primarily bronchitis due to extensive past cigarette smoking and obesity complications; hypertension under treatment and marginally controlled; left ventricular hypertrophy; and, obesity. EX 14 at 9.

The Employer called Thomas Godar, M.D., as a witness at the hearing. Dr. Godar testified that he has been licensed to practice medicine in the state of Connecticut since the late 1950's and is certified in internal medicine and pulmonary disease. TR at 81. He was certified in pulmonary medicine in about 1974 and does not need to be recertified because he is in the "grandfathered" group. *Id.* at 137. He completed medical school at Tufts University School of Medicine, did a one-year rotating internship at Philadelphia General, spent two years in the Air Force in Japan as a medical officer, was a medical resident at the Boston VA Hospital and an additional two years at the St. Francis Hospital in Hartford with the last six months as the chief resident, and was a fellow for one year at Yale. *Id.* at 82. He established a laboratory for pulmonary medicine at St. Francis Hospital and then a clinic, an associate degree school for respiratory care, a consultation service and an intensive care unit, which ultimately became a complete section. *Id.* He added that he remained an attending physician in the clinic at Yale on Tuesday mornings until approximately three years ago as a form of self-education and independent evaluation of patients because he was mostly involved in educational programs. *Id.* at 82-83. Finally, during the last 15 years of his practice, he did mostly workers' compensation work, which was strictly pulmonary medicine with regard to occupational and environmental exposures. *Id.* at 83. He stated that he has had the opportunity to diagnose and treat patients with a combination of both pulmonary and cardiac diseases and also to evaluate EBC employees mostly conducting independent medical examinations. *Id.* at 83-84.

Dr. Godar testified that he examined Mr. Birnie in 1997 and obtained a medical history from him, which included his exposures to asbestos in the Navy and possible but no specific exposure to blue asbestos, which is particularly hazardous; his work at the roller bearing company with no specific exposure; and his work at EBC where he was involved in only one renovation project and the rest new construction, which involves a more clean environment *Id.* at 85-88. He also conducted a review of x-ray films, including the chest x-ray and CT scan of November 29, 1996 and repeat studies done in 1997, in addition to his own films, and subsequent medical record reviews in 2002 and all of the trial exhibits in addition to being present at the hearing for the testimony of Mrs. Birnie and Mr. Hutchinson. *Id.* at 91-92, 106-107. He focused on Mr. Birnie's smoking history because of his complaints of cough and sputum on a regular basis and was looking for causes for Mr. Birnie's shortness of breath and abnormal chest x-ray. *Id.* at 87-88. Regarding the effect of work exposures, Dr. Godar found it significant that there were no reports of discrete episodes of impairment or leaving work to seek medical treatment, which would indicate a problem with work exposures. *Id.* at 89-90.

Regarding the cause of Mr. Birnie's death, Dr. Godar testified that the death certificate provided a good summary, which is myocardial infarction with chronic, but recently controlled, hypertension, and obesity as a factor. *Id.* at 93. He continued that there were indications of significant, if not well advanced, coronary artery disease, such as the 1995 catherization. *Id.* at 93-94.

He explained that an acute attack and death of heart muscle frequently occurs where obstruction is moderate where the cholesterol plaques may be released or ruptured. *Id.* at 93-95.

Dr. Godar also found it significant that the records did not show regular daily exercise for several months, which was contradicted by Mrs. Birnie's testimony. *Id.* at 95. He explained that the presence of recent, regular exercise is consistent with his concept that Mr. Birnie was having angina pectoris, or coronary artery disease, with physical activity in 1997, which might cause him to exercise more frequently to address his concerns about the angina. *Id.* at 97, 132-133. He stated that Mr. Birnie's obesity also caused his oxygen demand to be higher and his respiratory capacity to be lower, and in fact, his weight distribution was partially restricting his lungs. *Id.* Dr. Godar continued that when he saw Mr. Birnie in 1997, he had stopped smoking and still showed evidence of mild to moderate airway obstruction and no evidence of injury due to asbestos. *Id.* at 97-98. He interpreted the thickening in the pleura of the left chest as being caused by trauma or infection and not asbestos because he found no plaques to support exposure to asbestos, in addition to the physical examination not revealing signs of asbestosis, such as crackles. *Id.* at 98. Finally, Dr. Godar noted that the 1980 film shows an abnormality of the left base or difference in the structure of the ribs, which indicated a disease or trauma that predated his EBC employment or possibly some anomalous growth of the ribs in the left chest from his childhood that could cause a reduction in lung function. *Id.* at 98-99.

Regarding a possible connection between Mr. Birnie's cardiac arrest and death and his exposures to industrial irritants at EBC, Dr. Godar testified that,

I cannot find any connection that I could comfortably make, even though he had some obstructive airway disease that is consistent with bronchitis, which is the predominant form of COPD in a former smoker. And when you smoke 30 years, it is not likely that this disease is going to completely reverse.

I thought the obesity was a major factor. That, were he not so obese, this episode might have taken another year to occur. But, let's face it, he had significant coronary disease in 1995, and therefore, died in 2001, that's six years. Cardiologists would say that this is sort of an expected event in someone who didn't more aggressively pursue his management.

... with coronary disease, if you don't have the vascular disease that causes the ischemia and the death of the muscle and the cardiac arrest, then you're really not going to have it. If he had had congestive heart failure, and his problem was based on having congestion in the lung for periods of time, then you could add the congestion and his obstructive lung disease to the conditions under which he died. That was not the case.

Id. at 99-100. He clarified that there was no clinical evidence that congestive heart failure was a problem, but it is a possibility that he had a transient problem. *Id.* at 141.

Regarding Dr. Bigos's diagnosis of both obstructive and restrictive lung disease, he agreed that Mr. Birnie had restrictive disease based on the left pleural change at the left base, with much of it due to his obesity. *Id.* at 101. He disagreed that any of Mr. Birnie's restrictive disease was a result of asbestos exposure because it would need to be bilateral, which it was not, and there was no evidence of plaques, and even though Dr. Bigos referred to plaques, the B readers and Dr. Deren found an atypical pattern, there were no crackles, and his diffusion capacity was normal when it was tested in 1995. *Id.* at 101, 110. He explained that the normal diffusion capacity was significant because with asbestos, there should be reduction in diffusion capacity, particularly because he was a smoker. *Id.* at 102. He continued that Mr. Birnie did have atypical COPD in that he did not have emphysema, only bronchitis. *Id.* at 102. He stated that the industrial irritants may have contributed to Mr. Birnie's shortness of breath or cough for an intermittent period after the exposure, but he found no evidence that the exposures produced any progressive change, his airway disease was fairly stable, and there was no history of a connection between his work and the respiratory disease. *Id.* Further, Dr. Godar disagreed that Mr. Birnie's respiratory condition contributed to his deconditioned state and ultimate death, stating "that the deconditioning did not particularly affect his coronary artery flow. So I think the implications there are inappropriate." *Id.* at 102-103.

Dr. Godar testified that Mr. Birnie's obstructive disease did not play a role in causing or hastening his death because he did not have serious oxygen lax and exercised fairly vigorously. *Id.* at 103. He agreed that Mr. Birnie had pleural thickening but it was not caused by asbestos exposure in this case, rather more likely a traumatic injury, which could be minor and not investigated, or pneumonia, stating "[t]he last I would even consider would be asbestos-related disease." *Id.* at 103-104.

On cross-examination, Dr. Godar testified that he reviewed the 1996 and 1997 CAT scans, which were ordinary and not high resolution CAT scans, and agreed that high resolution CAT scans can pick up more fibrosis than ordinary CAT scans, although he thought that the high resolution scans only pick up what is already suspected. *Id.* at 106-108. Dr. Godar testified that obesity is defined as a body mass index ("BMI") greater than 30 and Mr. Birnie, at 300 pounds, had a BMI of 40, and at 259, it would probably be greater than 30. *Id.* at 122. He stated that even a 20 to 30-pound weight change could affect a person's pulmonary function test, but also the distribution of weight is important, and Mr. Birnie had central obesity, which impairs the diaphragm movement. *Id.* at 122-123. He continued that the weight distribution increases the work of breathing. *Id.* at 123. He testified that the numbers from Mr. Birnie's pulmonary function tests were similar, but interpretations vary in that Dr. Bigos called his obstructive "severe" and he labeled it "moderate." *Id.* at 126. He agreed that industrial exposures can cause chronic bronchitis, but it is difficult to know the etiology of bronchitis with a cigarette smoker because cigarette exposure usually exceeds the industrial exposures, which can be confirmed with a patient history. *Id.* at 129. He agreed that some welding fumes can contribute to chronic bronchitis. *Id.* He acknowledged that Mr. Birnie was on bronchodilators, Serevent and Proventil, to relax the smooth muscle in the bronchial tubes, and he at one time took steroids for his lung condition. *Id.* at 130. Dr. Godar acknowledged that pleural thickening can be found unilaterally in cases of asbestosis, but it would be a very early form that in five years would become bilateral. *Id.* at 130-131. On redirect, Dr. Godar testified that chronic

bronchitis did not play a role in causing or hastening Mr. Birnie's death because it is independent of the coronary occlusion and heart death. *Id.* at 141.

Other Documentary Evidence

Claimant introduced a Certificate of Marriage from the New Jersey State Department of Health, showing James L. Birnie married Jean D. Jones on December 17, 1966. CX 8. A funeral bill from Thomas L. Neilan & Sons, addressed to Mrs. Jean Birnie, dated June 14, 2001, showed that funeral services for James Lawrence Birnie cost \$3,765.00, including \$3,555.00 for services and \$210.00 for special charges for certified copies of death certificate and Norwich Bulletin. CX 9.

Employer introduced a copy of Mr. Birnie's health/fitness record, a note from W. Larry Beason, M.D. dated June 29, 2000, clearing Mr. Birnie to use the Fitness Center. EX 1a-b. A Certificate of Death, dated June 11, 2001 and signed by Dr. Beason, showing Mr. Birnie's death of death as June 9, 2001 and "immediate cause: myocardial infarction and due to, or as a consequence of: hypertension/obesity." EX 1-C. A City of Groton Police Department Report shows that officers arrived at the Fitness Center to find Mr. Birnie lying on his back dressed in workout clothing, Mr. Birnie had signed in, Dr. Johnson and Ms. Sklar arrived and provided officers with Mr. Birnie's Fitness Center record and other records from the Yard Hospital. EX 4 at 4. A Fitness Assessment form describes the procedure for the mandatory assessment and provides that "[i]f you utilize the Center during your scheduled work day, the time must be made up at your work station." EX 5.

Deposition of Kathryn L. Johnson

The parties offered the deposition transcript of Kathryn L. Johnson, taken on August 7, 2002. CX 13; EX 38. Dr. Johnson testified that she has been employed by EBC since May 1993 in the Occupational Health Center, otherwise known as the Yard Hospital, and as the full-time Medical Director since 1994. *Id.* at 4-5. She stated that she manages the Occupational Medicine Clinic and the Fitness Center and prior to a reorganization about two years ago, managed the Industrial Hygiene and Safety Departments. *Id.* at 5-6, 11. Her educational background includes a masters in industrial organization psychology, a masters in public health, a medical degree, and board certification. *Id.* at 7. With regard to the Fitness Center, she is the Senior Administrator-Manager reporting directly to the Vice President of Human Resources, Robert Nardone. She oversees the budget and supervises Doria Sklar and Jay Hans. *Id.* at 7-8. She stated that she had reviewed the application of Doria Sklar for qualifications and training, that Ms. Sklar's hours are complemented by ten hours of part-time help weekly, from Pro-Fitness, and that she pays Pro-Fitness about \$25 per hour. *Id.* at 32-34. With regard to the Occupational Health Clinic, she supervises approximately thirteen staff and serves as the physician in the company. *Id.* at 8.

Dr. Johnson stated that the Fitness Center existed prior to her employment at EBC and to her personal knowledge, it had always been a general population facility, but she had been told it was originally intended for executives. *Id.* at 11. She stated that there had been a full-time EBC employee responsible for daily operations, but when that person left, she chose to replace the position

with contract labor. *Id.* Under her management, she removed a spa that was in place when the Fitness Center was intended for executives to make the Center more of a general purpose facility and updated some of the equipment. *Id.* at 11, 27. Regarding the budget, she was only made aware of its existence, as a special overhead account, when a previous vice president told her that she had lost \$55,000, and to rectify that situation or he would close the Fitness Center. *Id.* at 12. She characterized the \$55,000 as “standard” and not “a lot of money” because the membership fee was low at \$2.00 per week with free towels and there was a high salary. *Id.* at 13. She changed the fee to a dollar extra for towels, transferred to contract labor, established 24-hour operations, and advertised the Center. *Id.* at 13, 21. She testified that she wanted to keep the Fitness Center open because she is an occupational medicine doctor and believes that exercise helps people live longer. *Id.* at 14-15. She acknowledged that the employees would be healthier if they had improved personal habits, including exercise. *Id.* at 15.

With equipment purchases, Dr. Johnson testified that she approves the purchases with recommendations from Ms. Sklar, bearing in mind the \$100,000 annual budget, personnel salaries and the goal of purchasing at least one \$5,000 piece of equipment annually. *Id.* at 18-19. Her goals for the Fitness Center are “to have an on-site cardiovascular fitness center that best represents what our Electric Boat population would want that also complies with what our preventive medicine framework would want.” *Id.* at 19. With regard to the budget, Dr. Johnson testified that she receives a monthly report of expenses and with an overall positive or negative assessment, which is looked at more closely by Jay Hans. *Id.* at 41-42. In addition, she receives a monthly report from Ms. Sklar on the use of the Fitness Center. *Id.* at 42. She testified that she does not charge her time spent on the Fitness Center to its overhead account, but she could. *Id.* at 27-28.

Dr. Johnson recited the requirements for membership, which are access through security, filling out the application and possible physician certification if she considers the applicant to be in a high risk situation. *Id.* at 19-20. She also makes recommendations with regard to wellness, such as goal weight and smoking for possible assistance by Ms. Sklar. *Id.* at 22. She stated that the template for the application form (attached as Exh. 1) predates her involvement. *Id.* at 21-22. With regard to directions on the fitness assessment that if the member uses the Center during his or her scheduled work day, the time must be made up, Dr. Johnson testified that all employees must be off the clock when they use the Fitness Center and a supervisor may allow a flexible schedule to work out, but they must do so after clocking out. *Id.* at 48. The applications are kept in the Fitness Center, and she has never denied a membership application, but has placed restrictions for medical reasons. *Id.* at 22-23.

Dr. Johnson testified that she had reviewed Mr. Birnie’s occupational health clinic medical report record after his death, which indicated that he was very overweight and had a long history of blood pressure problems, but was under good medical care. *Id.* at 24. She believed that his membership application had been filed with a physician’s clearance form so there had been no need for her to request one or restrict his membership. *Id.* She testified that Ms. Sklar provides a verbal introduction to new members, and there is a written rule on the wall that members should not work out alone when the Fitness Center is unstaffed, which is unofficially and verbally enforced. *Id.* at 24-

25. She explained that the rule was instituted to address concerns about medical emergencies or women working out alone. *Id.* at 25.

Dr. Johnson testified that the Fitness Center has a contract agreement with Weight Watchers, an instructor for step aerobics, and a person who does back massage, which are all paid for separately and members must engage in the programs in their off hours. *Id.* at 28. She explained that Ms. Sklar coordinates these activities and she approves them. *Id.* Regarding any programs she may have recommended, she testified that many of the programs predated Ms. Sklar and herself, but she recommended continuing involvement in the Great American Smoke Out, and she approved program ideas. *Id.* at 28-29. She testified that she had a goal of having 700 employees use the Fitness Center because of its small size, which had been met. *Id.* at 37-38. She agreed that cardiovascular exercise is good for general health as a preventive measure. *Id.* at 38. She testified that the Fitness Center had always been overseen by the Medical Director as it is natural for a company to place that responsibility under the medical and safety area. *Id.* at 39.

Regarding making any referrals of employees to the wellness programs, she testified that “I recommend whenever I do a physical exam on someone as part of basic training for physicians is to talk about prevention, and if they have a weight, alcohol, blood pressure problems, I will address that and tell them about the opportunities that the company allows on the company premises or tell them also what – a lot of them can use the company van if it’s not feasible and try to help them coming up with an exercise program on their own time at home.” *Id.* at 29. She testified that every new employee is given a post-employment examination and certain employees are given periodic physical exams who are in surveillance programs or for specific job titles. *Id.* at 29-30. Regarding any incentives for employees to participate in wellness programs, Dr. Johnson testified that EBC does not modify its health benefits charges for personal habits, such as smoking or wellness issues, and employees must participate in the programs on their own time. *Id.* at 30-31. She stated that the union and safety department agree on annual safety goals for injury rates and lost time rates and if they are exceeded, the union receives a cash incentive. *Id.* at 31. She stated that the chief of benefits organizes a wellness fair twice a year, which provides cholesterol check, blood pressure check with an emphasis on perhaps cancer or smoking cessation, and the Fitness Center is invited and may help out or advertise new equipment at the fair. *Id.* at 42-43.

Dr. Johnson testified that she was called on the day Mr. Birnie was found. *Id.* at 34. When she arrived at the scene, she recalled that the police had not allowed anyone else to enter before her because she was a physician. *Id.* at 35. She testified that she viewed the position of the body, noting that he was in his clothes and did not have his shirt off, but did not touch or examine him and was unable to tell how long he had been dead. *Id.* at 35-37. She stated that she went to his wife’s home to offer her condolences and services. *Id.* at 35.

Deposition of Jay C. Hans

The parties offered the deposition transcript for Jay C. Hans, taken on August 7, 2002. CX 12; EX 37. Mr. Hans testified that he has been employed at EBC for 21 years and is currently the

Supervisor of Audiology, Principal Audiologist, and Hospital Administrator, the last of which since 1998. *Id.* at 4. As Hospital Administrator, he has a number of responsibilities, including coordinating the Fitness Center by acting as the liaison between the Medical Director and Doria Sklar, handling contracts, and preparing and managing the budget. *Id.* at 4-5, 8. He believed that he began having responsibility for the Fitness Center around 1998 and before him it was always handled by the human resources departments. *Id.* at 5-6. With regard to Fitness Center contracts, they have contracts for laundry with Tollgate Laundry, Healthsouth Pro-Fitness, which employs Doria Sklar, and a vendor paid on retainer to repair and maintain equipment at approximately \$1,000 per year in addition to the costs for repair and parts. *Id.* at 8-9. He stated that they are charged back monthly for maintenance or general usage to EBC, which is a variable amount between about \$120 and \$230 per month, but he was unsure how it worked exactly. *Id.* at 11, 29-30. He testified that Ms. Sklar typically works four 10-hour days and they also have a part-time person hired by HealthSouth Pro-Fitness at maybe \$50 per hour, but he did not really know the exact amount. *Id.* at 9-10. For the laundry, they pay 40-50 cents a pound for towels, which amounts to a couple hundred dollars a week. *Id.* at 10. He stated that he receives a monthly spreadsheet on income and expenses from accounts management to review for inaccuracies and to maintain the monthly balance, which are kept slightly in the red or black each month. *Id.* at 30-31. With regard to the Fitness Center, he reports to the Medical Director about significant issues such as problems with the lights or air conditioning or contracts. *Id.* at 10-11.

Mr. Hans testified that anyone who can access EBC's security gate can be a Fitness Center member. *Id.* at 12. He stated that Ms. Sklar monitors the percentage of types of members of the roughly 730 total current members with 50 to 60 non-EBC employees, and the Center can accommodate about 25-30 people at one time. *Id.* at 12, 22. With regard to setting the 24-hour schedule, he stated that he suggested the hours and it was reviewed by Dr. Johnson, Ms. Sklar and a few other people. *Id.* He explained that the Fitness Center was open to 24 hours to accommodate members' requests and to hopefully increase the number of members. *Id.* at 12. He also periodically polls members to gauge their satisfaction or need for possible changes. *Id.* at 27.

Mr. Hans stated that there is a sign-in roster and a voluntary workout card system, which are kept at the Fitness Center, but he does not review the workout cards. *Id.* at 13. He did not know of any rules for the Fitness Center other than various signs posted with messages about items such as to clean up after yourself. *Id.* He stated that the Weight Watchers program is paid for separately by the members and does not take place in the Fitness Center, but in the Colonel Ledyard school, and that the step aerobics program is held in the same building, Building 88, but on a different floor. *Id.* at 14. He stated that the smoking cessation program was coordinated by him and assigned by Dr. Johnson through the Yard Hospital, not the Fitness Center. *Id.* at 33. He described the Fitness Center as providing an equipment area, locker rooms and utility rooms, with mostly aerobic exercise equipment, not a fully equipped gym, which allows them to keep costs fairly low. *Id.* at 14-15. Members enter through the door with a key code lock and then there's an approximately 15 foot hallway with a juice and Coke machine. *Id.* at 15.

Mr. Hans stated that there is a \$25 initial application fee for EBC employees, which they pay

to a cashier and bring a receipt to Ms. Sklar, and \$3 per month is deducted from their paycheck. *Id.* at 18. He believed that non-EBC employees paid every six months. *Id.* He testified that the annual budget, which is separate and not part of the hospital budget, is around \$70,000 per year, depending on the number of members and it is a zero-based budget, in that they can spend all their revenues, and there typically is a small amount of money left in the budget each year. *Id.* at 18-20. He stated that they increased the fee by 50 cents to pay for laundry service as opposed to allowing members to elect towel service. *Id.* at 21. He further stated that advertising is by word-of-mouth and listings on the overhead message boards for the programs. *Id.* He stated that the Fitness Center is worthwhile because it is requested by the employees, particularly those who work in Building 88 and typically have active lifestyles, and the Center does not cost the company money. *Id.* at 22.

Deposition of Doria Sklar

The parties offered the deposition transcript of Doria Sklar taken on July 24, 2002. CX 11; EX 36. Ms. Sklar testified that she is an employee of Pro-Fitness full-time since April 30, 1998, as fitness director at EBC, and receives a salary of \$29,800 plus partial medical coverage. *Id.* 4-5, 13. Her job responsibilities are to buy machinery through approval by Dr. Johnson, handle the machinery maintenance contract with Fitness Equipment Services, coordinate Weight Watchers, aerobics, fun runs, workouts, smoke out programs, and incentive programs. *Id.* at 5-6. She also has motivational programs, such as if the member works out a certain number of days during the weeks for Christmas, they receive a raffle ticket or prize, advertised on a dry wall board in the Center, and that she advertises promotional materials in the Fitness Center. *Id.* at 39, 42. She stated that the Fitness Center is open 24 hours/7 days, and her regular work hours are 8:00 to 6:00 or 7:00 to 5:00, Monday through Thursday, with 8:00 to 12:00 on Fridays. *Id.* at 6. She reports to Jay Hans and sees him about items, such as when she wanted to sell t-shirts and he will approve the item or send it to Dr. Johnson, if necessary, for her approval. *Id.* at 40-41.

Ms. Sklar testified that Amy Stoddard, a certified trainer and employee of Pro-Fitness, also works at the Fitness Center, Tuesday and Thursday, 4:00 to 6:00 and Friday 12:00 to 6:00. *Id.* at 6-8. She stated that she hired and supervises Ms. Stoddard, who was an aerobics instructor for the aerobic program, which takes place on another floor of the tech center and is coordinated by Ms. Sklar. *Id.* 8-12. She stated that the aerobics program is open to all employees at EBC and is advertised through an e-mail to most employees. *Id.* 12-13. She further stated that she does not advertise the Fitness Center. *Id.* at 13.

Ms. Sklar testified that the Fitness Center is on the first floor, along with the chauffeur's office and maintenance department, with access available through the garage. *Id.* at 14-15. The Fitness Center consists of a hallway, a weight room, cardio room, locker rooms, bathroom facilities and her office. *Id.* at 15-16. She stated that she has replaced some of the equipment since her employment began and that Dr. Johnson told her the new equipment was paid for by the payroll deductions from the members. *Id.* at 17-18. She recalled the cost of some of the equipment acquisitions of three new elliptical machines at prices comparable to \$4,266.50, but admitted that she did not see the budget for the Center. *Id.* at 18-19. She acknowledged that her ability to purchase new equipment is based

on the amount of payroll deductions and she receives a monthly list of payroll deductions, but does not see the expenses charged against the deductions. *Id.* at 19.

Ms. Sklar testified that applications with a medical questionnaire (Exh. 1) can be obtained from her, which are reviewed for completeness and medical issues by her and forwarded to Dr. Johnson for her approval. *Id.* at 20-22. She stated that people are rejected at times and then must obtain an outside physician's clearance. *Id.* at 23. She processed Mr. Birnie's application, but was never at the Fitness Center when he used it, and did not set up any programs for him. However, an assessment was done for him by a former employee, Ben Barrett. *Id.* at 24-26. She stated that members are asked to sign-in, which is sometimes complied with, and they maintain attendance sheets for statistical purposes. *Id.* at 24-25, 45-46.

Ms. Sklar testified that she handles promotion for the Center, such as health in-depth topics and the trainer handles personal assessments that consist of blood pressure, resting pulse, weight, height, girth, body girth, body fat or girth measurements, sub max bike test, upper musculature endurance, sit-ups, push-ups, and flexibility. *Id.* at 26-27. All members are basically required to have an assessment to use a guideline for the supervised workout and for informational purposes. *Id.* at 27-28. She testified that there is a Weight Watchers class held in the Colonel Ledyard School and they also have CPR training. *Id.* at 30-31. Regarding Center rules, Ms. Sklar stated that they advocate the buddy system particularly when the Center is unstaffed for safety reasons. *Id.* at 28-29. She stated that she also monitors the members for proper use of the machine to prevent injury. *Id.* at 43. There are presently 730 members and 698 at the time of Mr. Birnie's death and non-EBC employees pay the \$25 initial fee and \$78 every six months. *Id.* at 35-36. She testified that during a temporary six-month period, they had a physical therapy assistant visit the Center weekly for basic questions to see if there were aches and pains problems and to tell the members go to the physical therapy department across from the Yard Hospital, but it was discontinued because the therapist was very busy. *Id.* at 49-50. She acknowledged that the physical therapy assistant visited because Ms. Sklar or the trainer were not able to do that sort of thing. *Id.* at 51.

Affidavit and Deposition of John E. Elkins

The Employer offered an affidavit of its employee John Elkins, dated June 27, 2002, in which he attests that,

1. I am an employee of Electric Boat Corporation, currently employed as Senior Human Resources Representative.
2. I make this affidavit on the basis of personal knowledge following inquiry into the relevant facts.
3. Electric Boat maintains a Cardio Fitness Center (hereinafter referred to as "the gym") on the premises available for use by its employees, as well as authorized personnel from the U.S. Navy and certain contractors and joint venturers for payment of \$3.00 per week.

4. Of the 7,783 employees of Electric Boat at its Groton, CT facility, only 689 are members of the gym.

5. There is no requirement, express or implied, that Electric Boat employees use the gym.

6. Electric Boat employees are not paid for time spent at the gym.

7. James Birnie was an employee of Electric Boat, employed from March 24, 1980 until June 9, 2001.

8. According to Electric Boat records, Birnie joined the gym with the intention of losing weight and improving cardio pulmonary function. (A true and accurate copy of Birnie's Health/Fitness Record is attached as Exhibit "A").

9. Birnie began utilizing the gym August, 2000 after receiving medical clearance to do so from his primary care physician, Dr. W. Larry Beason. (A true and accurate copy of Dr. Beason's note is attached as Exhibit "B").

10. Birnie utilized the gym on 6 occasions in August, 10 occasions in September, none in October or November, 4 times in December, 3 times in January of 2001, none in February or March, 13 times in April, 29 times in May, and of course on June 9 (the date of his death).

11. At the time of the incident that is the subject of this litigation, James Birnie's regular shift was Monday through Friday 7:00 a.m. to 3:00 p.m.

12. James Birnie was not scheduled to work at Electric Boat on Saturday, June 9, 2001.

13. Birnie had no work-related purpose at Electric Boat on Saturday, June 9, 2001.

14. On Saturday, June 9, 2001, Birnie entered the Electric Boat grounds at 4:47 a.m. by way of the South Gate.

15. On Saturday, June 9, 2001, Birnie signed into the gym using a designation indicating that he had arrived sometime between the hours of midnight and 5:00 a.m.

16. On Saturday, June 9, 2001, at 7:45 a.m., Birnie was discovered on the floor of the gym by Douglas Mignosa.

17. Based on the investigation of the Groton Police and Electric Boat and the positioning of Birnie's body in the location it was found, it is impossible to ascertain whether Birnie, in fact, exercised on Saturday, June 9, 2001.

18. Birnie's Death Certificate lists the immediate cause of death as Myocardial Infarction

due to, or as a consequence of, Hypertension/Obesity. (A true and accurate copy of Birnie's Death Certificate is attached as Exhibit "C").

19. Birnie was represented by the Metal Trades Counsel of New London County and, therefore, subject to the collective bargaining agreement between the company and the union.

20. The collective bargaining agreement contains no provision for a gym or fitness center.

EX 1.

The parties offered the deposition of John L. Elkins taken on July 24, 2002. CX 10; EX 35. Mr. Elkins testified that he has worked at EBC for approximately 20 years and is currently Senior Human Resources Representative, reporting directly to John Swidrak, Chief of Security. *Id.* at 4-5.

He has investigated violations of established company rules and regulations, government contracts, major incidents such as assaults, and major medical emergencies, full-time since 1990 and part-time since 1987. *Id.* at 6-7, 21. He prepared a report in the matter of the death of James Birnie. *Id.* at 7. He stated that the Fitness Center is located in the basement of the technology center, known as Building 88, which is located on the river side of Eastern Point Road, in excess of 100 yards, but less than 150 yards from where work is performed on the submarines. *Id.* at 9, 31. He acknowledged that Building 88 is in the secured area and can be reached by employees, cleared vendors, and cleared Navy personnel with ID badges by going through electronic turnstiles at all of the perimeter gates. *Id.* He did not know how long the gym has been in existence, but not for the 20 years that he has worked at EBC. *Id.* at 10.

Mr. Elkins identified his affidavit (Depo. Exh. 1) with some attachments, including Mr. Birnie's health fitness record (Attachment A), which he obtained personally from the Fitness Center. *Id.* at 11-12. He stated that he did not personally obtain Attachment B, the doctor's statement, but believed it came from either the gym or Yard Hospital files. *Id.* at 12. He believed that he obtained Attachment C, the death certificate, from the Yard Hospital. *Id.* He believed that the gym was run through the Yard Hospital, but did not know for sure, but knew of two persons involved in running the gym, Doria, who may be a contractor and runs the Fitness Center and reports to Eric Jay [sic], who reports to Kathryn Johnson, chief of medical services at the Yard Hospital. *Id.* at 13.

Mr. Elkins indicated that he obtained information about Mr. Birnie's regular shift of 7:00 a.m. to 3:00 p.m. and the fact that he was not working on the date of his death from Mr. Birnie's supervisor, whose name he could not recall. *Id.* at 14-15. The opinion that Mr. Birnie had no work-related purpose at EBC on the day of his death was also obtained from the supervisor. *Id.* at 15. Mr. Elkins did not know if Mr. Birnie worked overtime. *Id.* at 14. He knew that Mr. Birnie arrived at EBC at 4:47 a.m. on June 9, 2001 because his badge was activated at one of their electronic turnstiles. *Id.* at 15. He learned that Mr. Birnie had signed into the gym at or before 5:00 a.m. on that date from the Fitness Center sign-in sheet. *Id.* at 16. He did not know the purpose of the sign-in sheet or whether it is a written requirement for people to sign-in, but he believed the Yard Hospital administered the rules for the fitness center. *Id.* at 16-17. He obtained information about when Mr.

Birnie became a member, the frequency of his visits, and the number of Fitness Center members from Doria Sklar and Eric Jay [sic], but did not know where they got that information. *Id.* at 20-21, 23. He obtained information that EBC does not require its employees to use the Fitness Center from division counsel, Douglas Peachey. *Id.* at 23-24. His attestation that employees are not paid for using the fitness center was based on his personal knowledge. *Id.* at 24. He stated that employees are not required to punch out to use the fitness center, even on lunch hour because they are already automatically deducted for a lunch hour. *Id.* He further stated that supervisors monitor employees to prevent use of the Center during working hours, and he has investigated employees for improper use and keeps records for these investigations. *Id.* at 25-26. He stated that he arrived at the fitness center on the day of Mr. Birnie's death and saw the body and its positioning in the hallway between the locker room and front door, but was unable to ascertain whether or not he had worked out. *Id.* at 30-32.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Claimant has proceeded under two theories. First, that Mr. Birnie's death arose out of and in the course of his employment at EBC based upon the fact that his death occurred at the EBC Fitness Center, which is supported by and located on the premises of EBC. Claimant's second theory is that she is entitled to benefits because Mr. Birnie's exposure to substances at EBC impaired his respiratory system, which contributed to the heart attack that caused his death. I will evaluate the latter theory first.

Occupational Lung Disease as Contributing Factor in Causing Mr. Birnie's Death

Positions of the Parties

Claimant argues that she is entitled to survivor's benefits under the Act because the credible medical evidence establishes that her husband's workplace exposures at EBC contributed to his myocardial infarction and death. Cl. Br. at 11-27. Claimant asserts that a *prima facie* case was established that her husband's death was causally related to his employment at EBC in that he sustained a harm (his myocardial infarction and death) and conditions existed at EBC (his exposures to asbestos and welding fumes) which contributed to the harm. *Id.* at 12-20. Further, Claimant contends that the testimony and report of Dr. Bigos, a board-certified pulmonologist, establishes the required nexus between the harm and the working conditions. *Id.* According to Claimant, Dr. Bigos opined that the workplace exposures at EBC contributed to Mr. Birnie's obstructive/restrictive lung disease, which contributed to a decrease in his oxygenated blood supply and limited his ability to exercise, that played a role in his de-conditioned state, including his obesity, and ultimately was a factor in his sustaining a myocardial infarction on June 9, 2001 which resulted in his death. *Id.*

In addition, Claimant asserts that Employer has failed to offer sufficient evidence to sever the connection between the workplace exposure and the harm. *Id.* at 20-26. Employer's medical expert, Dr. Thomas Godar, opined that Mr. Birnie's lung disease was not caused by his occupational

exposures, but rather his smoking history and obesity, and that his myocardial infarction was caused by the coronary artery disease, hypertension, and obesity. *Id.* In addition, Dr. Godar disagreed with Dr. Bigos's findings that the lung disease resulted in a de-conditioned state as evidenced by the absence of a serious oxygen lax and Mr. Birnie's ability to exercise vigorously. *Id.* However, Claimant contends that Dr. Godar's opinion is essentially unreliable because it: (1) is contradicted by record evidence that Mr. Birnie's history provides no other cause for his restrictive lung disease other than asbestos exposure, (2) Dr. Godar's theory that obesity causes a restrictive lung impairment has been rejected by the American College of Chest Physicians, (3) objective medical testing showed that Mr. Birnie had decreased oxygen saturation, and (4) Mr. Birnie's EBC records showed that he complained of severe shortness of breath on minimal exertions. *Id.* For these reasons, Claimant avers, Employer's proffered medical opinion evidence did not rebut the presumption of coverage. *Id.*

Finally, Claimant argues that even if Employer has rebutted the presumption, the evidence as a whole establishes that Mr. Birnie's death was causally related to his EBC employment. *Id.* at 27-28. Claimant notes that Dr. Bigos diagnosed Mr. Birnie with work-related asbestosis solely for the purposes of treatment and before these proceedings had begun. *Id.* In addition, Dr. Bigos's comprehensive explanation for the shortness of breath and how the lung disease contributed to his risk for myocardial infarction is supported by the pulmonary function studies, oxygen saturation tests, radiological films, the medical and occupational history, and established scientific principles. *Id.* In contrast, Claimant asserts, Dr. Godar has not treated patients in 15 years and limits his practice to conducting examinations for parties defending against workers' compensation claims. *Id.* Further, the objective medical evidence contradicts Dr. Godar's opinion, and in particular, his opinion that Mr. Birnie's lung disease was not caused by his workplace exposures. *Id.*

Employer asserts that Claimant failed to proffer a *prima facie* case of compensability. Emp. Br. at 3-4. Employer argues that Dr. Bigos's August 2002 opinion letter is too vague to establish a *prima facie* case. *Id.* In addition, according to Employer, Dr. Bigos's deposition testimony fails to bolster his opinion because he admitted that he never reviewed Mr. Birnie's death certificate and had no understanding of his cause of death, and more importantly, his opinion is contradicted by Mrs. Birnie's testimony that her husband exercised 5-6 times per week at the Fitness Center, in addition to engaging in other physical activities. *Id.* at 4.

Alternatively, Employer contends that it has offered substantial evidence to sever any causal connection between the workplace exposures and Mr. Birnie's death. *Id.* at 4-6. According to Employer, its medical expert, Dr. Godar, unequivocally testified that Mr. Birnie's death was in no way caused, hastened, or accelerated by his industrial exposures at EBC. *Id.* at 5. Moreover, Dr. Godar disputed that Mr. Birnie's left chest abnormality was caused by his asbestos exposure and the medical evidence clearly showed that Mr. Birnie did not have asbestosis, asserts Employer. *Id.* at 5-6.

Finally, Employer argues that the record evidence does not establish on a preponderance basis that Mr. Birnie's death was caused, hastened, or accelerated by his workplace exposures. *Id.* at 6-10. Employer points out that, unlike Dr. Bigos, Dr. Godar reviewed all the applicable documentation in

this case, including the parties' trial exhibits, and was present for the testimony of Mrs. Birnie and Mr. Hutchinson at the hearing. *Id.* at 7. Dr. Godar prepared two detailed and extensive reports in 1997 and 2002, unlike Dr. Bigos, which were consistent with his testimony, asserts Employer. *Id.* Further, Employer emphasizes that Dr. Bigos had not seen Mr. Birnie since 1998 and admitted that he had no knowledge of his diet and weight loss occurring after that date. *Id.* at 8-9. Additionally, Employer argues that Claimant's election not to use the services of his treating physician, Dr. Beason, as an expert is significant. *Id.* at 9-10. Finally, the fact that Mr. Birnie had been engaged in vigorous exercise since August of 2000 undermines Dr. Bigos's opinion that his pulmonary condition restricted his ability to exercise, Employer claims. *Id.* at 10.

Discussion and Conclusion

To prevail on her claim, Claimant must prove that her husband's myocardial infarction and death arose from hazards in his employment. *Grain Handling Co., Inc. v. Sweeney*, 102 F.2d 464, 465 (2d Cir. 1939), *cert. denied*, 308 U.S. 570 (1939). She is aided in this regard by section 20(a) of the Act which creates a presumption that a claim comes within its provisions. 33 U.S.C. §920(a). The section 20 presumption "applies as much to the nexus between an employee's malady and his employment activities as it does to any other aspect of a claim." *Swinton v. J. Frank Kelly, Inc.*, 554 F.2d 1075, 1082 (D.C. Cir. 1976) (*Swinton*), *cert. denied*, 429 U.S. 820 (1976). To invoke the presumption, there must be a *prima facie* claim for compensation, to which the statutory presumption refers; that is, a claim "must at least allege an injury that arose in the course of employment as well as out of employment." *U.S. Industries/Federal Sheet Metal, Inc., et al., v. Director, OWCP*, 455 U.S. 608, 615 (1982) (*U.S. Industries*). A claimant presents a *prima facie* case by establishing (1) that he or she sustained physical harm or pain and (2) that an accident occurred in the course of employment, or conditions existed at work, which could have caused the harm or pain. *Kelaita v. Triple A. Machine Shop*, 13 BRBS 326, 331 (1981); *Kier v. Bethlehem Steel Corp.*, 16 BRBS 128, 129 (1984).

As the parties have stipulated that Mr. Birnie sustained a harm, namely the myocardial infarction and death, the key inquiry is whether Claimant has established that conditions existed at work which could have caused or contributed to his death. Claimant offers the testimony of Robert Hutchinson, a former EBC employee, who worked on the same shifts with Mr. Birnie as test technicians in the Shipyard Test Organization, to show that Mr. Birnie was exposed to industrial irritants at EBC. Mr. Hutchinson testified that he worked with Mr. Birnie on the third shift and also after their transfer to the second shift. While Mr. Hutchinson testified that he did not usually work in the same area of the ships as Mr. Birnie, he credibly described the nature of their work environments and consequent exposure to industrial irritants such as dust, fumes and smoke, many times without the ability to retrieve a respirator to protect against these exposures. Based on this uncontradicted testimony, I find that Mr. Birnie was exposed to dust, fumes, and smoke during his employment at EBC.

Regarding Mr. Birnie's exposure to asbestos, Mr. Hutchinson testified that he and Mr. Birnie worked on overhauls together in the 1970's on the third shift, which involved cutting and ripping out

pieces of equipment. I note that Mr. Birnie did not start working at EBC until 1980; however, due to the passage of time, it is reasonable that Mr. Hutchinson did not remember the exact dates that he worked on overhauls with Mr. Birnie and the year 1980 is certainly close enough in time to the 1970's to credit the recollection. Further, he credibly testified that they worked together on the third shift, which he described as a small shift, and that they transferred to the second shift together, and Mrs. Birnie testified that her husband worked two shifts, 3:00 to 11:00 and 11:00 to 7:00, as a test technician. In addition, Mr. Hutchinson credibly testified that he worked on overhauls on the third shift. Further, Claimant offers an asbestos questionnaire, signed by Mr. Birnie and EBC's physician, Dr. Kathryn P. Johnson, dated February 18, 1998, in which Mr. Birnie reported asbestos exposure, and the medical evidence demonstrates that Mr. Birnie consistently reported asbestos exposure from overhaul work at EBC to his physicians. Based on this evidence and the absence of any contradictory evidence regarding Mr. Birnie's asbestos exposure, I find that Mr. Birnie was exposed to asbestos during his employment at EBC.

To demonstrate the relationship between Mr. Birnie's exposure to industrial irritants and his death, Claimant introduced a report and the deposition transcript of John P. Bigos, M.D., a board-certified pulmonary specialist, who examined Mr. Birnie approximately four times in 1996 through 1998 at the request of his family physician, Larry Beason, M.D., because of the detection of pleural thickening on radiological films and to determine if there was any pulmonary contribution to Mr. Birnie's complaints of exertion-related shortness of breath. A CT scan taken in November 1996 confirmed the existence of pleural thickening and areas of patchy interstitial infiltrate in Mr. Birnie's left chest. Dr. Bigos determined that the pleural thickening was related to Mr. Birnie's workplace asbestos exposure at EBC and when he served in the Navy after he ruled out the other potential causes, which are pneumonia and traumatic injury, through taking a medical history. Mrs. Birnie's testimony confirms that her husband never had pneumonia. In addition, Dr. Bigos diagnosed Mr. Birnie with combined obstructive/ restrictive lung disease, with general industrial irritants and smoking contributing to the obstructive impairment and industrial asbestos exposure contributing to the restrictive impairment. Finally, Dr. Bigos provided an opinion letter dated August 23, 2002, that Mr. Birnie's exposure to industrial irritants contributed to his obstructive and restrictive lung disease that was a significant factor in limiting his ability to engage in any meaningful exertion which contributed to his deconditioned state and consequently his cardiac problems and ultimate death. Dr. Bigos offered deposition testimony to explain that his opinion was based on his clinical examination of Mr. Birnie, a medical and occupational history, and radiological and laboratory findings.

Upon review of this proffered evidence, I conclude that Claimant has offered ample evidence to establish a *prima facie* case of compensability despite Employer's assertions to the contrary. While Dr. Bigos's August 23, 2002 letter may have been conclusory, he more than adequately explained the mechanics of his opinion in his deposition in order to establish the requisite nexus between Mr. Birnie's industrial exposures and his myocardial infarction and death to invoke the section 20(a) presumption. In addition, I have considered the other alleged deficiencies in Dr. Bigos's opinion, such as his failure to review the death certificate and the supposed contradictory evidence that Mr. Birnie was engaging in vigorous exercise, and conclude that they do not prevent the establishment of a *prima facie* case, but rather deal more with the ultimate weight of Dr. Bigos's opinion which may

become relevant in an analysis of the record evidence as a whole, if that becomes necessary, after my evaluation of Employer's rebuttal evidence.

Since Claimant has made the requisite *prima facie* showing of harm and the existence of working conditions which could have caused or aggravated the harm, she prevails on the causation issue unless Employer produces substantial evidence severing the presumed connection between such harm and employment or working conditions. *Volpe v. Northeast Marine Terminals*, 671 F.2d 697, 701 (2d Cir. 1981). When aggravation of or contribution to a pre-existing condition is alleged, the presumption also applies, and in order to rebut it, the employer must establish that the claimant's condition was not caused or aggravated by his employment. *Rajotte v. General Dynamics Corp.*, 18 BRBS 85, 86 (1986). Where the employer presents "specific and comprehensive" evidence sufficient to sever the connection between the harm and the employment, the presumption no longer controls and the issue of causation must be resolved on the record as a whole. *Swinton v. J. Frank Kelly, Inc.*, 554 F.2d 1075, 1081-85, 4 BRBS 466 (D.C. Cir. 1976), *cert. denied*, 429 U.S. 820 (1976).

I agree with Employer's characterization of the opinion of its board-certified pulmonary expert, Dr. Godar, in that he unequivocally testified that Mr. Birnie's death was not caused, hastened, or accelerated by his industrial exposures at EBC nor did they contribute to his obesity. I find that this opinion clearly constitutes sufficient evidence to sever the connection between Mr. Birnie's death and his employment at EBC. I have considered Claimant's assertions that Dr. Godar's opinion is inconsistent with the objective medical evidence, the medical and occupational history, and established scientific principles. However, similar to my view of Employer's allegations about Dr. Bigos's opinion, these perceived inconsistencies do not undermine Dr. Godar's ultimate opinion that his lung disease did not play a role in Mr. Birnie's myocardial infarction and death for purposes of offering rebuttal evidence. Accordingly, I find that Employer has successfully rebutted the presumption.

Once the presumption of causation has been successfully rebutted, "the presumption no longer controls and the issue of causation must be resolved based on the evidence as a whole." *Devine v. Atlantic Container Lines, G.I.E.*, 25 BRBS 16, 20-21 (1990). Therefore, the undersigned must determine whether Claimant has shown by a preponderance of the evidence that Mr. Birnie's myocardial infarction and death is causally related to his employment with Employer. *Director, OWCP v. Greenwich Collieries*, 512 U.S. 267, 280-81, 28 BRBS 43 (CRT) (1994). Before conducting a determination on the ultimate question of whether the workplace exposures contributed to Mr. Birnie's death, I will first evaluate the contradictory medical opinion evidence and make certain findings leading up to this question. First, the medical experts are in agreement that Mr. Birnie had pleural thickening in the left lung and a combined obstructive/restrictive pulmonary impairment and I so find. However, the experts dispute the cause of the pleural thickening and the combined impairment. Dr. Godar opines that Mr. Birnie's pleural thickening was caused by a traumatic injury, perhaps a congenital abnormality, or pneumonia, and not by his asbestos exposures. However, Mrs. Birnie's testimony and the medical history obtained from Mr. Birnie by Dr. Bigos indicate that Mr. Birnie never had pneumonia. Further, while Dr. Godar stated that even a minor injury or congenital abnormality could have caused the pleural thickening, he fails to point to anything

in the medical history that might constitute the minor injury or to any evidence of a congenital abnormality. Moreover, Dr. Godar's conclusion is predicated on his opinion that asbestos exposure does not typically cause unilateral pleural thickening; however, that opinion is weakened significantly by his own admission that unilateral pleural thickening may be an asbestos-related condition in an early form. Finally, contrary to Employer's assertion, Dr. Deren, the thoracic surgeon, did not rule out asbestos as the cause for the pleural thickening, but identified the findings as atypical. Given Dr. Godar's admission and the inconsistencies between Dr. Godar's opinion and the medical history, I am persuaded that Dr. Bigos has the correct opinion and find that the asbestos exposures at EBC contributed to the pleural thickening.

Regarding the cause of the restrictive impairment, Dr. Bigos relates the impairment to the workplace asbestos exposures while Dr. Godar concludes that the restrictive impairment was caused primarily by his "centralized" obesity. However, the record discloses that the American College of Chest Physicians rejects the notion that restrictive impairments are caused by obesity, and Employer offers no evidence to contradict this official policy. Given this inconsistency with generally accepted medical principles, I am crediting Dr. Bigos's opinion that Mr. Birnie's exposure to asbestos at EBC contributed to his restrictive lung impairment. Regarding the obstructive impairment, Dr. Bigos states that the workplace exposures to welding fumes, dust, and smoke contributed to the impairment, and Dr. Godar testified that his COPD or bronchitis was caused by his previous smoking habit and not the industrial exposures because his disease was fairly stable and there was no history of a connection between his work and the disease. Dr. Godar admits that workplace exposures could cause chronic bronchitis and it is difficult to know the etiology of the condition in a smoker, also stating Mr. Birnie's COPD was atypical for a smoker because of the absence of emphysema. Given this qualification and the medical record which shows that Mr. Birnie continually complained of shortness of breath problems in contradiction to Dr. Godar's characterization of his disease as stable, I find that the workplace exposures to general industrial irritants at EBC were a factor in causing the obstructive impairment.

Having found that Mr. Birnie's workplace exposures contributed to his pulmonary impairments, I must now weigh the differing medical opinions on the ultimate question of whether these work-related impairments contributed to Mr. Birnie's myocardial infarction and death. Both medical experts are board-certified pulmonary specialists with impressive backgrounds. Dr. Godar maintains that any lung impairment played no role and was independent of the cardiac problems and myocardial infarction and death. Dr. Bigos opines that the impairment contributed to a difficulty in oxygenating the blood, both by creating a problem in getting air into the lungs and getting oxygen into the blood stream by passive diffusion, which interfered with his ability to engage in significant exercise and contributed to his de-conditioned state, obesity, and poor cardiovascular condition. He concluded that these conditions all created a high risk for cardiovascular problems and that poor delivery of oxygenated blood to the heart is essentially a heart attack.

Regarding the alleged deficiencies in Dr. Bigos's opinion pointed out by Employer, it is true that, unlike Dr. Godar, Dr. Bigos did not review the medical records after 1998, the parties' trial exhibits, or Mrs. Birnie's testimony about her husband's exercise routine. However, the mere fact

that Dr. Bigos was not present at the hearing and did not review the death certificate or medical records after 1998 do not automatically render his opinion unreliable. It was brought to Dr. Bigos's attention at his deposition that Mr. Birnie had been exercising and had lost weight and the causes listed on the death certificate. He testified that even with the weight loss, Mr. Birnie's condition may have improved, but he would still have been considered obese. Indeed, Dr. Bigos knew that Mr. Birnie had a physically active job and that his decreased ability to oxygenate the blood, due in part from the lung impairments, would explain Dr. Beason's recommendation that he exercise slowly. Moreover, Dr. Bigos opined that the lung impairments would have made it difficult for Mr. Birnie to engage in meaningful exercise, not that he was incapable of exercising. I note that there is no indication in the medical records after 1998 that the lung impairments were no longer present, albeit with some improvement; therefore, the relational chain as proposed by Dr. Bigos between the impairments, the difficulty oxygenating the blood and engaging in meaningful exercise, and his cardiac problems and death is still intact. In addition, while Dr. Godar conducted an extensive record review and produced lengthy reports, his opinion lacks the specificity contained in that of Dr. Bigos. This lack of specificity, in addition to the inconsistencies found previously between Dr. Godar's opinion and the medical history and established scientific principles, tend to undermine the reliability of his ultimate opinion. Accordingly, I have determined to credit the opinion of Dr. Bigos over that of Dr. Godar and conclude that Mr. Birnie's exposure to asbestos and other industrial irritants at EBC were a contributing factor in his myocardial infarction and death.

Whether the Injury Occurred in the Course and Scope of Employment

Positions of the Parties

Claimant argues that Mr. Birnie's death is compensable because it occurred in the time and space boundaries of his employment and in the course of an activity related to his employment, pointing out that Mr. Birnie died in EBC's Fitness Center after he had signed in to use the gym. Cl. Br. at 29-33. Claimant asserts that, generally, an activity is related to employment if it benefits the employer, but the scope of employment may also be enlarged to include recreational or social activities in the absence of a showing of direct benefit to the employer, if the activity is in fact an inherent part of the conditions of the employment, given the nature of the employment environment, the characteristics of human nature, and the customs and practices of the employment, citing *Sheerer v. Bath Iron Works Corp.*, 35 BRBS 45 (2001). *Id.* at 33, citing in turn, 2 Arthur Larson & Lex K. Larson, *Larson's Workers' Compensation Law* § 20.00 (2000). Claimant contends that where, as here, the activity takes place on employer's premises during regular work hours, there is no need to show employer sponsorship or benefit, even where Mr. Birnie was not working on the day of his injury because he regularly worked overtime on weekends, citing *Sheerer, supra*, *McNamara v. Town of Hamden*, 176 Conn. 547, 398 A.2d 1161, 1165 (1978); *Denver v. Lee*, 168 Colo. 208, 450 P.2d 352, 355 (1969).

Alternatively, Claimant points out that in determining whether a social or recreational activity constitutes an inherent part of employment, courts look at six factors: (1) whether the employer sponsors the activity; (2) whether the employer encourages employees to participate; (3) whether the

employer finances the activity to a substantial extent; (4) whether employees regard it as an employment benefit to which they are entitled as of right; (5) whether the employer benefits from the activity; and, (6) whether the activity occurs on the employer's premises during work hours citing *Vitola v. Navy Resale & Services Support Office*, 26 BRBS 88 (1992). *Id.* at 33-34. Claimant argues that the undisputed facts satisfy virtually all of these criteria, compelling a finding that the use of the Fitness Center was an incident of employment conditions and Mr. Birnie's death occurred in the course of his employment. *Id.* at 34-45.

Employer contends that Mr. Birnie's mere presence on its premises at the time of his death is insufficient to establish that his myocardial infarction and subsequent death arose in the course of his employment because he was participating in an unsanctioned social activity at that time, citing *Alston v. Safeway Stores, Inc.*, 19 BRBS 86, 88 (1983). Emp. Mot. Sum. Dec. at 4, 9-10. Further, any link to employment is severed by Mr. Birnie's participation in an activity that was personal in nature and not employment-related, Employer points out. *Id.* Specifically, Employer argues that Claimant has failed to establish a *prima facie* case sufficient to invoke the section 20(a) presumption because, while she has shown that Mr. Birnie sustained a harm, she has not demonstrated that an accident occurred or working conditions existed which could have caused the harm. *Id.* at 6. Employer cites to *Cairns v. Matson Terminals, Inc.*, 21 BRBS 252 (1988) for the proposition that the Claimant cannot take advantage of the section 20(a) presumption in the absence of a showing that an injury or circumstances at work contributed to the alleged harm. *Id.* at 6. Finally, Employer argues that even if Claimant established a *prima facie* case of coverage, it has offered sufficient evidence to rebut the presumption and Claimant has not met her burden of proof that she is entitled to benefits because Mr. Birnie's membership at and use of the Fitness Center was for personal reasons and was not an inherent part of his employment conditions, citing *Vitola, supra*. *Id.* at 7-13.

Discussion and Conclusion

Section 2(2) of the Act provides that an "injury" must arise out of and in the course of employment in order to be compensable. 33 U.S.C. §902(2). Similar to the analysis for Claimant's first basis for compensation, Claimant must first establish a *prima facie* case (1) that her husband sustained a physical harm or pain and (2) that an accident occurred in the course of employment, or conditions existed at work, which could have caused the harm or pain. *Kelaita v. Triple A. Machine Shop*, 13 BRBS 326, 331 (1981); *Kier v. Bethlehem Steel Corp.*, 16 BRBS 128, 129 (1984). The parties stipulated to a harm, the myocardial infarction and death, and Claimant alleges that the injury is compensable because it occurred at the Fitness Center on EBC's premises after Mr. Birnie had signed in to work out. In her statement of undisputed facts relevant to this issue, Claimant focuses primarily on facts which allegedly show that the Fitness Center was an incident of employment, but does assert that Mr. Birnie was a member of the Fitness Center and worked out there regularly. From these asserted facts, it is reasonable to conclude that Claimant alleges that the use of the Fitness Center was the condition which contributed to Mr. Birnie's death. Cl. Br. at 29-32. Further, I find that even though the evidence does not establish that Mr. Birnie exercised on the day of his death, it is uncontradicted that he used the Fitness Center to exercise for a period of approximately ten months prior to his death, that he signed in to use the Fitness Center on that day, and was discovered

dressed in his workout clothes after his death. I conclude that, for purposes of establishing a *prima facie* case, these facts are sufficient to demonstrate the use of the Fitness Center as the condition which contributed to the harm.

Having demonstrated the condition which contributed to the harm, Claimant must next show that the condition, the use of the Fitness Center, occurred within the time and space boundaries of employment and within the course of an activity whose purpose is related to the employment. *Durrah v. Washington Metropolitan Area Transit Auth.*, 760 F.2d 322, 17 BRBS 95 (CRT) (D.C. Cir. 1985); 2 Arthur Larson & Lex K. Larson, *Larson's Workers' Compensation Law*, § 20.00 (2000). Where an injury incurs while the employee is engaged in recreational or social activities, the claimant must establish a nexus between the recreational or social activities and the employment. *Vitola v. Navy Resale & Services Support Office*, 26 BRBS 88, 90 (1992). Further, recreational or social activities are considered within the course of employment, when one of the following conditions is present:

- (1) they occur on the premises during a lunch or recreation period as a regular incident of employment;
- (2) the employer, by expressly or impliedly, requiring participation, or by making the activity part of the services of an employee, brings the activity within the orbit of the employment; and,
- (3) the employer derives substantial direct benefit from the activity beyond the intangible value of improvement in employee health and morale that is common to all kinds of recreation and social life.

Larson, *supra*, §22.01 (2000). Where none of these conditions exist, the Benefits Review Board ("Board") has considered the following factors in making a determination of whether a voluntary social or recreational activity arose in the course of employment:

- (i) Did the employer in fact sponsor the event?
- (ii) Was there some degree of encouragement to attend (i.e., was the activity during work hours for which the employee was paid; did the employee have to perform his regular duties if he did not attend, was attendance taken)?
- (iii) Did the employer finance the event to a substantial extent?
- (iv) Did the employee regard it as an employment benefit to which they were entitled as of right (i.e., was the activity customary, such as an annual holiday party)?
- (v) Did the employer benefit from the event; not merely in a vague way through better morale and good will but through some tangible advantages, such as having an

opportunity to make speeches and awards?

(vi) Did the activity occur on employer's premises?

Vitola, 26 BRBS at 91-92, citing *Larson*, *supra*, § 22.23.

Claimant argues that it is unnecessary to engage in the analysis of these six factors, where, like here, there is a showing that the activity occurred on the employer's premises during regular work hours and the employer either approved of or acquiesced in the activity, citing *Sheerer v. Bath Iron Works Corp.*, 35 BRBS 45 (2001); *McNamara v. Town of Hamden*, 176 Conn. 547, 398 A.2d 1161, 1165 (1978). In addition, it is argued by Claimant that this legal standard applies in this case despite the fact that Mr. Birnie died on a day when he was not scheduled to work, citing *Denver v. Lee*, 168 Colo. 208, 450 P.2d 352 (1969), where the court concluded that an injury was compensable even though the employee was off duty because if he had been working his regular shift, he would have been injured during his regular working hours.

Claimant is correct that injuries occurring during a social or recreational activity on the employer's premises during regular hours are generally compensable with a showing that the employer approved of or acquiesced in the activity. *See Larson*, *supra*, § 22. In addition, this legal standard also applies in cases where the injury occurred during the employee's lunch hour or immediately before or after a regularly scheduled shift based on the rationale that these times are sufficiently contiguous to the regular hours. *See id.* Accordingly, in *Sheerer*, the Board found that an employee injured while playing ping-pong during his lunch hour on the employer's premises was entitled to compensation where there was evidence that the employer had knowledge of the activity and acquiesced in it. *Sheerer*, 35 BRBS at 49. Similarly, in *McNamara*, the court held that an employee who was injured while playing ping-pong on the employer's premises just prior to the start of his work shift was entitled to compensation where the evidence established that the employer approved of or acquiesced in the ping-pong activity. *McNamara*, 398 A.2d at 1164-66. In so holding, the court found that the period just before the start of the regular work shift comes within the period of employment for these purposes. *Id.* at 1164-65.

Upon a review of these cases, it is clear that Claimant cannot establish the compensability of her claim based on a showing of employer acquiescence or approval because Mr. Birnie sustained his injury on a day that he was not scheduled to work, which is too remote in time from his regular work hours. In addition, I reject Claimant's argument that *Denver v. Lee*, *supra* supports the application of this legal standard to the instant case even if, as Claimant asserts, Mr. Birnie regularly worked weekends and the only reason he was not working on the day of his death was because he was attending a wedding. In *Lee*, the court affirmed the compensability of an injury occurring during a police department basketball game even though the injured employee was not scheduled to work at that time. *Lee*, 450 P.2d at 354-55. It is true that the court found that the department regularly allowed employees to play during their shift with pay and the injured employee, who rotated his shifts, would have been paid for playing if he had been scheduled to work at that time. *Id.* However, the court also based its ruling on a showing of employer sponsorship, testimony by the police chief that

the department benefitted from the activity, significant employer financial assistance, and the existence of a department regulation that considered all players “on duty” during the game. *Id.* Contrary to Claimant’s assertion, the compensability of the claim in *Lee* was not predicated on a finding of employer approval or acquiescence in recreational activities taking place on its premises during regular hours, but rather based on a sufficient showing of connection to the employment conditions including employer sponsorship and significant employer financing. Consequently, I conclude that a determination of the compensability of the instant claim must be based on an analysis of the six factors recited and applied by the Board in *Vitola*.³

Turning now to those factors, regarding employer sponsorship, in *Vitola*, the Board concluded that there was insufficient evidence of employer sponsorship where a senior management employee instigated and organized a softball game, the employee received approval to announce the game at a senior management meeting, the employer provided the field, bats and balls, and the game was played in lieu of employer’s annual picnic when it was traditionally played. *Vitola*, 26 BRBS at 96. The Board noted that this factor focuses on employer instigation of the activity, not passive approval or acquiescence. *Id.* at 93-94. Here, I find that the evidence establishes that the Fitness Center has been in existence since at some point prior to the hire of Dr. Johnson, EBC’s Medical Director and Senior Administrator-Manager of the Fitness Center, in May, 1993, and that the Fitness Center is intended for the benefit of EBC’s general population, meaning all EBC employees and certain individuals such as Navy contractors with security access to EBC’s premises, although it may have been originally intended for executives. With regard to her Fitness Center duties, Dr. Johnson reports to Robert Nardone, the Vice President of Human Resources, and that prior to her management of the Fitness Center, it was managed by the Human Resources Department. Dr. Johnson directly supervises Jay Hans, EBC’s Hospital Administrator, who coordinates the Fitness Center, handles the contracts, oversees and manages the budget, and acts as the liaison between Dr. Johnson and Doria Sklar, an employee of an independent contractor, HealthSouth Pro-Fitness, who was retained by EBC to handle the daily operation of the Fitness Center. Prior to the retention of Doria Sklar on April 30, 1998, an EBC employee was in charge of the daily operation of the Fitness Center and was replaced after her departure with Ms. Sklar. Based on these findings, I conclude that the degree of EBC instigation and direct control of the Fitness Center is unlike the passive employer acquiescence found in *Vitola*, where the game had been instigated and organized by an individual employee, who merely announced the game at a staff meeting with employer’s approval.

In addition, I find that the following facts, many of which were identified by Claimant on brief, provide additional support for the conclusion that Employer controlled and sponsored the Fitness Center. The evidence shows that all Fitness Center applications must be reviewed and approved by Dr. Johnson, EBC’s Medical Director; EBC handles the deduction of membership fees for its employees through its Payroll Department; EBC’s accounting department produces a monthly

³ It must be noted that in *Vittola*, a recreational event was being analyzed. Here, it is a facility that provides a venue for recreational and health and fitness activities. Therefore, the analogy is not precise, but the factors are still highly useful in determining the nature of the activity and its relationship to employment.

budgetary report and determines the appropriate amount of a monthly charge back to the company for an undefined Fitness Center use; Dr. Johnson approves the operational policies and purchases for the Fitness Center; and EBC has contracts with vendors for staff, laundry services, and equipment maintenance and repair. Significantly, as pointed to by Claimant, when it was brought to the attention of Dr. Johnson that the Fitness Center was operating at a \$55,000 loss by her supervisor in Human Resources at that time, she was told that the Fitness Center would be closed if this budgetary situation were not resolved. I find that these facts strongly point to EBC control, and in effect sponsorship, of the Fitness Center. Finally, I note that Employer's Exhibit EX 2, identified as "Cardio-Fitness Center hours of operation and instruction publication" states in pertinent part that, "If you have forgotten the code or didn't get it from the fitness director, the yard hospital (after proper identification) will provide this information to you." and, "In case of emergency, call extension 3-333 or 3-3344." This sign provides further evidence of the connection between EBC and the Fitness Center, in that members may contact the Yard Hospital to obtain the door combination during unstaffed hours and EBC telephone extensions are called for emergencies. Finally, the connection between EBC and the Fitness Center is further evidenced by Ms. Sklar's testimony that a physical therapist from the Yard Hospital visited the Fitness Center weekly to answer basic questions for a six-month period of time until the therapist became too busy.

Regarding employer encouragement, in *Vitola*, the Board held that there was insufficient evidence of employer encouragement where the senior manager merely allowed or acquiesced in the organizing employee announcing the game at a staff meeting and briefly attend the game. *Vitola*, 26 BRBS at 93. The Board pointed out that employer encouragement is generally found where the employer holds the event on a work day, the employees are paid for the day and are required to report for regular duties if they choose not to participate, or where the supervisor strongly suggests, but does not compel, participation. *Id.* Here, while the evidence of employer encouragement does not rise to the level suggested as concrete evidence by the Board, I find there is strong evidence of employer encouragement, in that Dr. Johnson approved of the Fitness Center participation in and presence at the bi-annual wellness fairs hosted by the Chief of Benefits, and that the Fitness Center advertised its programs on EBC's overhead message boards and the e-mail system. Dr. Johnson stated that "We tried to advertise ourself more, let new hires know we're there...to offer more services, to get more attention". Exh. CX- 13 at p. 14. This encouragement is from EBC's Medical Director.

I note that these findings are consistent with a case decided under the Pennsylvania workers' compensation statute where the court found that employer's posting of information to encourage its employees to engage in sports activities to relief stress and improve their health was determinative in awarding compensation for an injury occurring at a gymnasium on the employer's premises during the lunch hour. *Hemmler v. Workmen's Comp. App. Bd.*, 569 A.2d 395 (Pa. Commw. Ct. 1990). *But see 3M Company v. Illinois Indus. Comm'n*, 78 Ill. 2d 182, 399 N.E.2d 612 (1980) (denying compensation despite posting of advertisements for club hosting activity where no employer sponsorship of the activity or paid leave offered to employees for attendance). The fact that employees have to make up time from work that they spend at the fitness center, and have to be "off the clock", goes against Claimant's position. But the other indicia of encouragement here are so

strong as to render this factor of lesser importance.

Regarding the employer finance factor, in *Vitola*, the Board found that the employer's payment of softball bats and balls and their storage on the premises was insufficient to show employer financing of the softball game to a substantial extent. *Vitola* 26 BRBS at 94-95. In analyzing this factor, the Board noted that the focus is on financial aid with an attendant business purpose, rather than any gratuitous contribution to social and recreational life. *Id.* Therefore, I conclude that in order to analyze this factor, it is necessary to first look at whether the existence of the Fitness Center provides a benefit to the Employer. Regarding this factor, in *Vitola*, the Board held that intangible benefits, such as building employee morale and camaraderie are insufficient to establish employer benefit, *Id.* at 93, and the language of the factor references the ability to make speeches and give awards as sufficient evidence. Here, the evidence lies somewhere in between the intangible type of employer benefit such as building employee morale and the indisputable employer benefit of being able to make speeches or give awards. EBC derives a benefit from the Fitness Center in that its use advances the health and well-being of its employees as demonstrated by Dr. Johnson's testimony about her Fitness Center goals, which "are to have an on-site cardiovascular fitness center that best represents what our Electric Boat population would want that also complies with what our preventive medicine framework would want." CX 13 at 19. In addition, the Fitness Center constitutes a part of EBC's wellness initiatives for its employees, which is shown by its inclusion at EBC's wellness fairs and its advertisement on EBC's overhead message boards. Finally, EBC's commitment to wellness, to which the Fitness Center is a part, is further evidenced by its other wellness programs, including smoking cessation programs, and the agreement between the union and EBC's safety department to provide cash incentives to reduce the number of injuries and lost time, which clearly benefits the Employer.

Returning to the employer finance factor, I find that the evidence establishes that EBC provides financial assistance to the Fitness Center in the form of subsidizing the salary of two management-level employees, in addition to the salary of its employees that handle the payroll deductions and the Fitness Center budget. Additionally, EBC finances the Fitness Center by locating it on its premises with corresponding maintenance and facilities costs. There is evidence that a variable amount, ranging from approximately \$120 to \$230 per month, is charged back to EBC from the Fitness Center budget, but it is unclear from the testimony of Jay Hans, who manages the budget, what the charge represents. In addition, the evidence shows that at some point during Dr. Johnson's management, the Fitness Center had incurred a \$55,000 loss, which Dr. Johnson described as "standard" and not "a lot of money" given the low membership fee and high expenses. While the evidence does not show that the Fitness Center continued to incur this type of loss, particularly given EBC's threat to close the Center if the situation were not corrected, it does provide further evidence of EBC's financial subsidization of the Fitness Center, which could certainly be characterized as substantial, given that the annual budget for the Fitness Center is approximately \$70,000 to \$100,000. This combined evidence of financial subsidy is certainly greater than that found in *Vitola*, where the employer had merely purchased some softball bats and balls and provided an outdoor field, even making allowance for a comparison between a one-time event and a 24 hour accessible fitness center facility. I conclude that EBC provides financial support for the Fitness Center to a substantial extent

with the attendant business purpose of deriving a benefit in improved health of its employees and contribution to its wellness initiatives.

Regarding employment benefit, this factor refers to whether the activity was customary in nature, and I find that the existence of the Fitness Center for at least 10 years, pre-dating Dr. Johnson's hire in 1993, shows that the use of the Fitness Center was customary, as opposed to an activity that occurs on a special or one-time basis. It is true, as Employer references in its brief, that there was no provision in the union agreement for EBC to provide the gym to its employees; however, the same evidence of EBC control I found in the analysis of the employer sponsorship factor, in conjunction with the advertisement of the Fitness Center at EBC wellness fairs and on overhead message boards, lends further support to a finding that EBC employees may reasonably have come to view the Fitness Center as an employment benefit to which they were entitled as of right.

Employer admits and I so find that the Fitness Center is located on Employer's premises in the basement of the Technology Building within EBC's secured area. In *Vitola*, the Board held that this factor alone is insufficient to demonstrate compensability, but recognized its great importance in borderline cases. *Vitola*, 26 BRBS at 96, citing Larson, *supra*, § 22.11. To summarize my findings on the other five factors, I concluded that there is significant evidence of employer sponsorship and control and evidence of employer encouragement, benefit, finance and employment benefit which exceeds that found in *Vitola*. The parties have cited to no directly analogous cases decided under the Act and my research indicates that this may be a case of first impression. The Board noted, in *Vitola*, that New York law is instructive in the absence of relevant law under the Act and also continued to refer to New York cases even after the enactment of a statutory provision addressing this issue in 1983. *Vitola*, 26 BRBS at 94-95 & n.1. That provision, section 10, provides that injuries occurring during voluntary recreational activities are compensable if the employer (a) requires participation; (b) compensates the employee, or (c) sponsors the activity. *Id.* at n.1. In a similar case under New York law, *Baker v. Sentry Group*, 703 N.Y.S.2d 299 (N.Y.A.D. 2000), the court affirmed a compensation award for an injury occurring during a basketball game at a gym on employer's premises after hours based on a finding of employer sponsorship where the employer exerted pervasive control of the gym by providing all equipment and employing a coordinator and overt encouragement by offering gift certificates, movie tickets and other benefits as incentives, and distributing flyers advertising the gym. There are some differences between this New York case and the instant one, notably that the injury occurred after a shift end and not on a non-scheduled day, but the evidence of employer control and encouragement are sufficiently analogous to support my finding of significant employer sponsorship in this case. Given this evidence of significant employer sponsorship, in conjunction with my findings on employer encouragement, benefit, finance and employment benefit, and the location of the Fitness Center on EBC's premises, an important factor in close cases, I conclude that substantial evidence exists that the Fitness Center is an inherent part of the conditions of employment and that, consequently, Mr. Birnie's myocardial infarction and death occurred within the course of his employment. In *Vitola*, the Board stated that in the absence of substantial evidence that the recreational or social activities are unrelated to the workplace, the section 20(a) presumption provides that injuries occurring during these activities are compensable.

Id. at 90.

As I have concluded that substantial evidence establishes that the Fitness Center is an inherent part of the conditions of employment, the section 20(a) presumption controls unless Employer can establish that the use of the Fitness Center did not contribute to Mr. Birnie's death. Employer argues that Mr. Birnie's use of the Fitness Center was solely for personal reasons to lose weight, which severs any connection between the injury and the employment, citing *Compton v. Avondale Ind., Inc.*, 33 BRBS 174 (1999) and *Alston v. Safeway Stores, Inc.*, 19 BRBS 86 (1986). Generally, an activity must be so thoroughly disconnected to the employment to be considered no longer within the course of employment. *Compton*, 33 BRBS at 177. In *Compton*, the Board held that an injury sustained while claimant went outside his assigned work area to smoke a marijuana cigarette was not within the course of employment. *Id.* at 178. In *Alston*, the Board ruled that the claimant was not entitled to compensation when she was injured in an accident in the employer's parking lot while she was waiting to attend an unsanctioned social activity, namely a dinner with co-workers to celebrate her transfer to another store. *Alston*, 19 BRBS at 87-88. I have already concluded that the use of the Fitness Center was not only a sanctioned recreational activity, but was actively sponsored and controlled by the Employer. Consequently, these cases do not support a finding that Mr. Birnie's activity was so unrelated to the employment conditions to be considered solely personal in nature and therefore not within the course of employment. Accordingly, I conclude that Claimant has established that Mr. Birnie's myocardial infarction and death occurred within the course of employment, entitling her to survivor's benefits under the Act.

Interest on Unpaid Compensation

Although not specifically authorized in the Act, the Benefits Review Board and the courts have consistently upheld interest awards on past due benefits to ensure that the employee receives the full amount of compensation due. *Strachan Shipping Co. v. Wedemeyer*, 452 F.2d 1225, 1228-30 (5th Cir.1971); *Quave v. Progress Marine*, 912 F.2d 798, 801 (5th Cir.1990), *rehearing denied* 921 F. 2d 273 (1990), *cert. denied*, 500 U.S. 916 (1991); *Watkins v. Newport News Shipbuilding & Dry Dock Co.*, 8 BRBS 556 (1978), *aff'd in pertinent part and rev'd on other grounds sub nom. Newport News v. Director, OWCP*, 594 F.2d 986 (4th Cir. 1979); *Santos v. General Dynamics Corp.*, 22 BRBS 226 (1989). Interest is due on all unpaid compensation. *Adams v. Newport News Shipbuilding & Dry Dock Co.*, 22 BRBS 78, 84 (1989). The Board has also concluded that inflationary trends in the economy render use of a fixed interest rate inappropriate to further the purpose of making claimant whole, and it has held that interest should be assessed according to the rate employed by the United States District Courts under 28 U.S.C. §1961 (1982) which is the rate periodically changed to reflect the yield on United States Treasury Bills. *Grant v. Portland Stevedoring Company*, 16 BRBS 267, 270 (1984), *modified on reconsideration*, 17 BRBS 20 (1985). My order incorporates 28 U.S.C. §1961 (1982) by reference and provides for its specific administrative application by the District Director. The appropriate rate shall be determined as of the filing date of this Decision and Order with the District Director.

Attorney's Fees

Having successfully established her right to survivor's benefits, Claimant is entitled to an award of attorneys' fees under section 28(a) of the Act. *American Stevedores v. Salzano*, 538 F.2d 933, 937 (2d Cir. 1976); *Ingalls Shipbuilding v Director, OWCP*, 920 F.2d 163, 166 (5th Cir. 1993). In my order, I will allow the Claimant's attorney 30 days from the date this Decision and Order is filed with the District Director to file a fully supported and fully itemized fee petition as required by 20 C.F.R. §702.132, and the Employer will be granted 15 days from the filing of the fee petition to file any objection.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law and upon the entire record, I issue the following compensation order. The specific dollar computations of the award shall be administratively performed by the District Director.

It is therefore **ORDERED** that:

1. The Employer, Electric Boat Corporation, shall pay to the Claimant, Jean D. Birnie, funeral expenses in the maximum allowable amount of \$3,000.00 pursuant to 33 U.S.C. §909(a), and widow's compensation benefits pursuant to 33 U.S.C. §909(b) based on an average weekly wage of \$1,151.63, plus the applicable annual adjustments provided in Section 10 of the Act,⁴ beginning on June 10, 2001.
2. The Employer shall pay to the Claimant interest on any past due compensation benefits at the Treasury Bill rate applicable under 28 U.S.C. §1961 (1982).
3. The Claimants' attorneys shall file, within thirty (30) days of receipt of the filing of this Decision and Order in the office of the District Director, a fully supported and fully itemized fee petition, sending a copy thereof to counsel for the Employer who shall then have fifteen (15) days to comment thereon; and

⁴ Annual adjustments pursuant to section 10(f) of the Act are payable on October 1st of each year once an employee acquires status of permanent and total disability. *Phillips v. Marine Concrete Structures, Inc.*, 895 F.2d 1033, 1035 (5th Cir. 1990). The Decedent acquired such status on December 3, 1998.

4. All computations of benefits and other calculations which may be provided for in this Order are subject to verification and adjustment by the District Director.

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WILLIAM J. COWAN
Administrative Law Judge

Boston, Massachusetts
WJC:jal